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CHACOAN COMMUNITY
CULTURAL RESOURCES
INTERIM MANAGEMENT PLAN

UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
ALBUQUERQUE DISTRICT OFFICE

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CHACOAN COMMUNITY
CULTURAL RESOURCES
INTERIM MANAGEMENT PLAN

Department of the Interior
Bureau of Land Management
Albuquerque District

L. Paul Applegate, District Manager — Date

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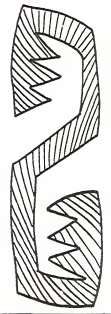
INTRODUCTION



PURPOSE AND SCOPE

The purpose of this Interim Cultural Resource Management Plan (CRMP) is to provide for the protection and maintenance of the prehistoric Chacoan communities located on lands administered by the Bureau of Land Management (BLM) in New Mexico. These lands include those with BLM surface management as well as those lands where the BLM manages only the subsurface minerals. This Interim CRMP will serve as guidance for BLM managers in the protection and use of Chacoan communities until a comprehensive land use plan (MFP or RMP) is completed and its decisions carried forward in the long-range CRMP. It will apply to the next 4 or 5 years.

In order to implement this Interim CRMP, the BLM will institute a system of patrolling and surveillance of the prehistoric Chacoan communities to reduce the possibilities of loss or damage through vandalism, unauthorized use, or natural forces. In some cases, interim structural stabilization and off-site erosion control will be needed. For a few of the communities, it will be necessary to carry out inventory and mapping projects to determine and record current condition and status. All of the known prehistoric Chacoan communities will be assessed for possible withdrawal of federal minerals from entry under the Mining Law of 1872 and the Mineral Leasing Act of 1920.

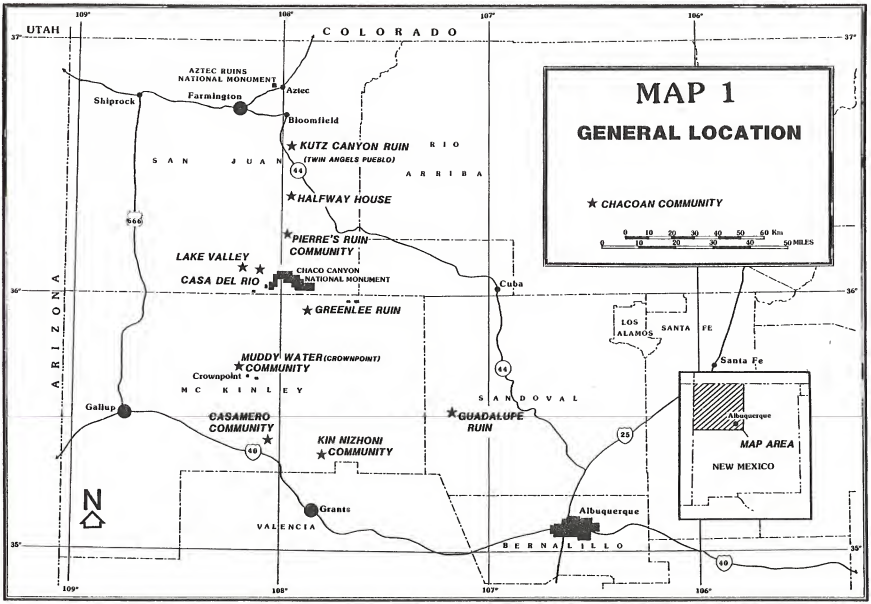
DESCRIPTION OF THE AREA

Cultural Resources

The prehistory of the Four Corners region of the American Southwest is extraordinarily complex. Although the archaeological record extends back to the earliest prehistoric period, the most spectacular physical remains date between A.D. 900 to A.D. 1200. It was during this time that the Chacoan Anasazi culture flourished throughout the San Juan Basin, an area encompassing northwestern New Mexico and parts of Arizona and Colorado.

Archaeological research of the past decade has produced evidence that the prehistoric Chacoan culture may have been the most highly organized and far-reaching culture of its time on this continent north of Mexico. The Chacoan cultural system grew to include at least 80 communities spread throughout a 50,000 square mile region (the San Juan Basin and its southern periphery). All of these communities may have been linked by an extensive road system emanating from the massive masonry structures of Chaco Canyon. Researchers have suggested that the many outlying communities probably provided essential goods to the major Chacoan towns in and around Chaco Canyon, which served as the economic, administrative, and possibly religious center of the culture.

The communities appear to have been built according to a standardized design. Typically a Chacoan community has a multistory masonry structure of 10 to 100 rooms symmetrically laid out around or adjacent


MAP 1
GENERAL LOCATION
★ CHACOAN COMMUNITY
0 10 20 30 40 50 60 Kms
0 10 20 30 40 50 MILES
UTAH
COLORADO
NEW MEXICO
ARIZONA
109°
108°
107°
106°
37°
36°
35°
AZTEC RUINS NATIONAL MONUMENT
Aztec
Farmington
Shiprock
Bloomfield
★ KUTZ CANYON RUIN
(TWIN ANGELS PUEBLO)
SAN JUAN
RIO ARRIBA
★ HALFWAY HOUSE
566
★ PIERRE'S RUIN
COMMUNITY
LAKE VALLEY
CASA DEL RIO
CHACO CANYON NATIONAL MONUMENT
Cuba
★ GREENLEE RUIN
LOS ALAMOS
SANTA FE
Santa Fe
MUDDY WATER (CROWNPOINT) COMMUNITY
Crownpoint
MC KINLEY
SANDOVAL
Gallup
CASAMERO COMMUNITY
★ GUADALUPE RUIN
KIN NIZHONI ★ COMMUNITY
Albuquerque
MAP AREA
Grants
VALENCIA
BERNALILLO
N

to an enclosed plaza. Circular ceremonial rooms called kivas are located both in the structure and in the plaza. Numerous smaller one-story structures of 3 to 10 rooms are clustered in the vicinity. Often a communal (great) kiva is nearby. A reservoir and irrigation facilities may be present.

Geology and Topography

Geologically, this region is known as the San Juan Basin, a bowl-like structure formed over many centuries by a combination of mountain uplift, volcanic activity, ocean and river deposits, and soil erosion. A wide variety of topographic features are found within this structure, including flat mesas, sharp ridges, deep arroyos, flood plains, dunes, badlands, and steep-walled canyons. The Continental Divide cuts through the southern and eastern parts of the area. Elevations range from 5,000 to 8,400 feet. Refer to Figure 1 for a photo of Guadalupe Mesa.

Climate and Vegetation

The climate of the area is now, as it probably was in Anasazi times, mainly arid and semiarid. These conditions result from high daytime temperatures, infrequent rain- and snowfalls, dry air, and numerous sunny days. Combined with the alkaline sandy and clay soils and limited, intermittently flowing surface water over much of the Basin, the climate leads to the presence of large spans of barren land and grassland. Over smaller areas, pinyon and juniper woodlands can be found. Stands of oak and ponderosa pine are seen less frequently, and true riparian vegetation occurs only along the San Juan, Animas, and La Plata Rivers and their tributaries.

Social and Economic Conditions

The Four Corners region is one of social change and economic growth. Mining, services, trade, and government are the primary employment sources. Lifestyles are varied, ranging from urbanized (in such communities as Grants, Farmington, and Gallup) to rural (subsistence-style grazing on the Navajo Indian Reservation). Three major cultures share the Basin: Indian (mainly Navajo, but also Jicarilla Apache, Ute, Acoma, Jemez, Laguna, Zia, and Zuni), Hispano (Spanish-American), and Anglo (non-Spanish whites). (However, the immediate vicinity of Chaco Canyon and the Chacoan communities is still sparsely occupied, primarily by the Navajo people.) The separate values, lifestyles, and beliefs of each group have been maintained until recently, when the boom in energy-related industry has brought the groups into closer contact with each other and with in-migrant groups.

Land Ownership Pattern

Energy development and other land uses in the Basin are influenced by a "checkerboard" land ownership pattern. Many federal agencies exercise surface land and resource use controls. These agencies include: the Bureau of Land Management, Bureau of Indian Affairs, National Park Service, Water and Power Resources Service, U.S. Forest Service, and Department of the Army. In addition, the State of New Mexico, the Navajo Tribe, and private individuals own land that is

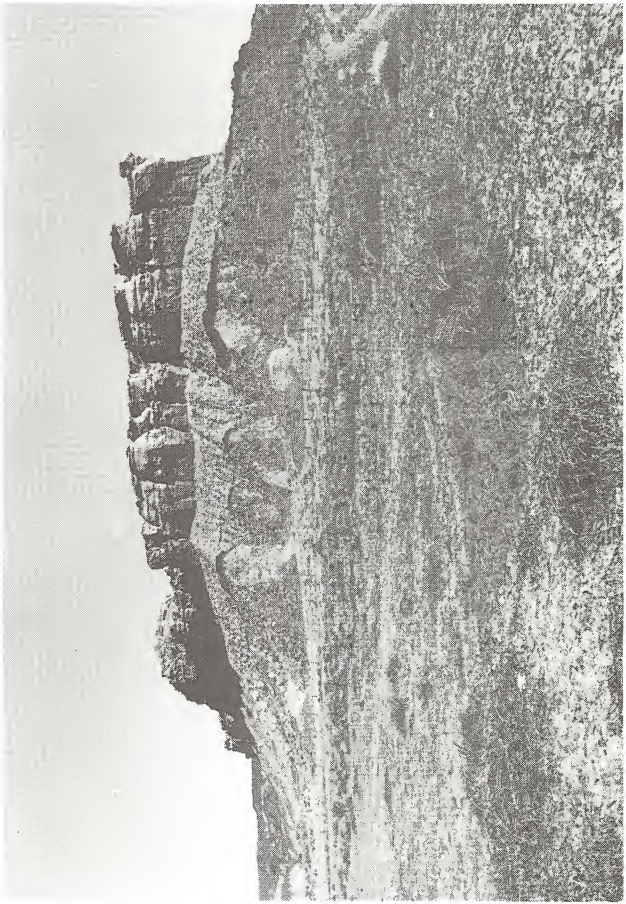


Figure 1 - Guadalupe Mesa

intermingled with the federal lands. Management of the subsurface (i.e., the minerals) estate is equally complicated.

BACKGROUND - ENERGY DEVELOPMENT AND RESOURCE CONFLICT

Today the San Juan Basin is a center of the nation's energy development. Over 77,000 acres of the Basin have been applied for under coal leases. New recovery techniques are being developed to increase the production of oil and gas in the Basin, which already supplies 6 percent of the oil and 44.5 percent of the gas produced in New Mexico. There are over 100 uranium mines and an estimated 30,000 uranium claims throughout the Basin.

In conjunction with the development of energy resources in the Basin, other resource values must be considered. The area's paleontologic resources compose a unique and fairly complete fossil record of the period during which mammals succeeded dinosaurs as the dominant life form. Air quality, scarce water resources, visual resources, vegetation, and wildlife are highly susceptible to damage by mineral activity. Existing land uses such as recreation, grazing, small-scale dryland farming, and wilderness are also in conflict with mineral development. And the record of the ancient Anasazi civilization found in Chacoan communities cannot be ignored. Cooperation of all agencies and individuals involved in the Basin is needed to ensure a balance between uses, so that the environment is not degraded, nor resources wasted.

STATUS OF INVENTORY

Archaeological investigations of the major ruins in Chaco Canyon began over a century ago; however, not until the past decade did research reveal glimpses of the possible magnitude of the Chacoan society. During the 1970's, as the need for a regional approach to study became clear, research was directed toward the outlying communities. Continued research with a regional view will be necessary to explain the Chacoan system.

In 1976, the BLM sponsored the Bisti-Star Lake Project, a cultural survey of 37,610 acres that sampled approximately 10 percent of an area of coal leasing interest on public lands north of Chaco Canyon. A similar survey covering 18,000 acres of public land is currently in progress in the area south of Chaco Canyon.

In 1979, New Mexico State University prepared for the BLM a cultural resource overview of northwestern New Mexico, which compiled existing cultural resource information available on much of the San Juan Basin. A number of inventories have been carried out by other land management agencies in the San Juan Basin and by private organizations. The 1979 publication, Anasazi Communities of the San Juan Basin (Marshall, Stein, Loose, Novotny; funded by the Public Service Company of New Mexcio and the New Mexico Historic Preservation Bureau), is the most recent and definitive set of data on Chacoan archaeological sites in the Basin.

PRESSURES, TRENDS, AND PROJECTIONS FOR CULTURAL RESOURCES

For some 10,000 years the San Juan Basin has been the homeland of various cultures who have utilized the natural resources of resources of the Basin in whatever means possible. Ever-improving technologies have made new demands on the land.

Energy development in the Basin over the next decade will result in over 200 miles of new railroad bed, hundreds of miles of roads and power lines, major processing plants and generating stations, at least one new town with a populaton of 20,000, and the disturbance of thousands of acres of land. The population growth accompanying energy development will accelerate the need for developing more recreation areas, and the new roads energy developers build will open once-remote areas of the Basin to this new population as never before. Improved access, the growth of population, and the increasingly lucrative market for antiquities will result in the pillaging of sites and accelerated attrition of the cultural resource base.

Navajo families have occupied lands in the San Juan Basin for generations. Some of these Chacoan ruins are important to Navajo tradition; some contain shrines, and all have spiritual associations for the Navajo. The building of new structures and demolition of old ones by Navajo families is a continual cycle, however, and ruins sometimes serve as a source of building material.

Both the archaeological and paleontological professions have special interest in the San Juan Basin as a rich storehouse of information. Scientific methods of data collection, however methodical they may be, are often destructive and therefore constitute a one-chance-only use of the resource. The Chacoan archaeological sites, as well as many others of the estimated 250,000 cultural resources throughout the San Juan Basin, stand in peril of damage or complete destruction from either uncontrolled development or wanton vandalism.

COORDINATION WITH OTHER RELATED DOCUMENTS AND AGENCIES

BLM Initiatives

Cultural resource management is an integral part of the multiple use land management mandate of the BLM (refer to Appendix 1). Through the comprehensive BLM planning system, mineral leasing and development actions are carefully evaluated to avoid or minimize adverse effects on cultural resources. The full scope of the BLM's cultural resource management program is presented in Appendix 1.

Bisti Region Multiple Resource Program

The BLM Albuquerque District has planned the Bisti Region Multiple Resource Program as an administrative facility to centralize permit processing and facilitate energy development while protecting valuable heritage resources (archaeology, paleontology, wilderness, and recreation). The BLM has proposed to intensify multiple use management practices in the San Juan Basin by creating this special project office in a Critical Management Area (CMA). Resource

conflicts are likely to occur in this area as a result of proposed development of federal coal reserves. The facility staff will include professional cultural and natural resource specialists. The facility itself may be located adjacent to Pierre's Ruin Community, one of the most spectacular sites of Chacoan origin. Detailed plans for this program have been submitted to the BLM Washington Office for approval.

Existing legislative and regulatory authorities require that no land-modifying activities will be undertaken on public lands until all sites within the impact area have been identified by professional archaeologists, and the significance and dispostion of those resources has been determined by the BLM in consultation with the State Historic Preservation Officer.

Withdrawal Requests

Permission has been requested by the BLM to file an application to withdraw from mineral entry lands surrounding Pierre's Ruin Community, Kin Nizhoni Community, Kutz Canyon Ruin, Halfway House, and Casamero Community. If this action is approved by the Secretary of the Interior, these lands would be withdrawn from appropriation and development under the 1872 Mining Law. Designation of Areas of Critical Environmental Concern (ACECs) and National Conservation Areas (NCAs) are also being investigated as alternatives to provide long-term protection for significant cultural resources. Withdrawal and designation of areas of special environmental protection would be compatible with management policies that the National Park Service believes are needed to protect prehistoric ruins in Chaco Canyon National Monument from indirect impacts caused by mining on public lands.

BLM Planning Documents - San Juan Basin

San Juan Planning Unit Management Framework Plan (MFP)

The MFP for the San Juan Planning Unit, developed by the BLM Albuquerque District in 1978-79, clearly sets forth procedures to protect prehistoric and historic cultural resources. The plan recommends physical and administrative protection measures, and schedules surveillence for a wide range of Archaic, Anasazi, Navajo, Hispanic, and Anglo habitation sites, use areas, and rock art. A public education program (called "PAST" - "Protect America's Silent Treasures") to emphasize the vulnerability of cultural resources is also proposed. Ten acres of public land surrounding Kutz Canyon Ruin are recommended for withdrawal from multiple use, so that the ruin can be managed as an ACEC for its archaeological value.

Chaco Planning Unit Resource Management Plan (RMP)

An RMP will be completed for the Chaco Planning Unit in 1988. Field surveys are being undertaken to identify and record cultural resources in a ten percent sample of this Planning Unit, and the survey results will be used to make an objective estimate of the nature and distribution of cultural resources throughout the Planning Unit. Detailed on-site records for Pierre's Ruin Community, Halfway House,

and Kin Nizhoni Community are being compiled at this time for use in determining long-term management and protection needs.

BLM Site Stabilization

Structural stabilization has been completed for 19 sites managed by the BLM in New Mexico (see Appendix 2). Most of this work was performed to protect the architecture of 17th and 18th century Navajo sites in the vicinity of Farmington. Eight Anasazi ruins located in the BLM Albuquerque and Socorro Districts have been stabilized, and a number of others are being recorded in detail as part of protection planning. Through the cultural resources inventory and evaluation procedures, representative sites are selected for long-term protection.

The BLM, in a joint effort with the Water and Power Resources Service, has stabilized the Anasazi sites of Escalante and Lowry, located in southwestern Colorado. The agencies have proposed construction of an Anasazi Heritage Center to house artifact collections for study and display.

Other Agency Initiatives

In recent years, every land management agency in the San Juan Basin has had to react to the rapid expansion of energy exploration and related development. In almost all cases, Chacoan communities have been protected by relocating project facilities to avoid impact to the immediate area of large structural sites. The Bureau of Indian Affairs, the National Park Service (Branch of Indian Cultural Resources), and the Navajo Tribe have used this form of interim management to protect Kin Ya'a, Muddy Water Community, Section 8, and many other communities.

Since 1907, the National Park Service has managed the massive ruins in Chaco Canyon. Surveys and studies of the Chacoan culture were begun by the NPS in 1969. Aztec Ruins (New Mexico) and Yucca House (Colorado) National Monuments are also maintained by the NPS.

The New Mexico Historic Preservation Bureau and the Public Service Company of New Mexico jointly funded the study, Anasazi Communities of the San Juan Basin (Marshall, Stein, Loose, Novotny, 1979). A general nomination to the National Register of Historic Places was made for most of the Anasazi communities recorded by the survey. Six Chacoan sites located on public lands have been nominated. They are Kin Nizhoni Community, Casamero Community, Halfway House, Pierre's Ruin Community, Kutz Canyon Ruin, and Guadalupe Ruin. Greenlee Ruin, Lake Valley, Casa del Rio and Muddy Water (Crownpoint) Community, also nominated to the National Register of Historic Places, are located on lands for which BLM holds the subsurface (mineral) estate.

Tucson Gas and Electric Company has leased lands surrounding Bisa'ani Pueblo from the Navajo Tribe prior to coal strip mining. To protect the ruin, they have hired archaeological consultants to map the site in detail and to perform test excavations to define the extent of surface and subsurface cultural resources.

Salmon Ruin, a Chacoan outlier located near Bloomfield, New Mexico, has been excavated and partially stabilized by Eastern New Mexico University and the San Juan County Museum Association. The site is open to the public, and continues to be used to train students in techniques of archaeological excavation and stabilization.

Coordination between agencies responsible for cultural resources in the San Juan Basin has only recently begun. In 1979, the Interagency Committee for the Coordination of Cultural Resource Programs in the San Juan Basin was formed to facilitate the exchange of information and the coordination of cultural resources management programs. The BLM State Office archaeologist has served as the elected chairperson of this group. Representatives of the following other agencies have participated in these discussions: National Park Service, Bureau of Indian Affairs, U. S. Forest Service, Heritage Conservation and Recreation Service, Water and Power Resources Service, the Advisory Council on Historic Preservation, the Navajo Tribe, and the State Historic Preservation Officers of New Mexico and Colorado. While the committee has addressed the immediate need for better distribution of cultural resource survey data, they have not yet addressed the question of long-term management and protection of significant cultural resources.

MANAGEMENT OBJECTIVES

The objective of this interim CRMP is to prevent further or irreversible deterioration of Chacoan communities for which the BLM controls the surface and/or subsurface estates. In this interim period the BLM cultural resources management program will initiate those studies and actions needed to preserve these sites and to provide necessary data for long-term planning. The BLM will excercise full authority to protect the communities and ruins from adverse effects caused by vandalism or by actions initiated or authorized by the BLM.

CONSTRAINTS

Management Framework Plans have not been completed for all of the areas considered in this CRMP. Therefore, conflicts between resources that are normally resolved through the BLM's planning system will be analyzed in the environmental assessment (EA) prepared before this CRMP is implemented. Present constraints are discussed below.

Wilderness Study Areas

Any action performed on a Chacoan community lying within the boundaries of an identified Wilderness Study Area will be taken only after the preparation of an EA. The action will be taken in a manner that will not impair the wilderness characteristics of the area.

Threatened or Endangered Species

No threatened or endangered (T or E) species habitat is known to exist on any BLM-managed Chacoan community. A survey of the communities for

Figure 2 - Dittert Ruin, before (top) and after (bottom) stabilization by the BLM in 1976.

T or E species will be conducted before the start of any activity that will cause disturbance of the land surface.

Areas of Critical Environmental Concern

When a Chacoan community falls within an identified Area of Critical Environmental Concern (ACEC), the BLM will consider the purpose and intent of the ACEC designation in carrying out any action on the community. Any impacts on the ACEC will be documented in the EA analyzing the proposed action on the community.

Socio-Cultural Considerations

The Navajo people use many areas throughout the San Juan Basin as sacred or ceremonial areas. Some of these areas include Chacoan communities. Interim protection measures on those communities will be scheduled to allow the Navajo people to contine to use these areas as they have in the past.

Land Ownership

A complex land ownership pattern occurs throughout the San Juan Basin. Table 1 lists the ownership of lands for each Chacoan community discussed in the CRMP. Where the BLM manages the surface and subsurface estates, cultural resources will be protected and managed through the BLM's comprehensive multiple resource management policies. Where the BLM controls only the subsurface or mineral estate, withdrawals from mineral entry can only guarantee that no future mineral leases or claims will be issued, and that those leases or claims that become delinquent will not be renewed.

Minerals Development

The status of mineral leases, permits, and mining claims on lands under the Chacoan communities addressed in this plan is shown in Table 1. When valid mineral leases, permits, or mining claims exist on a community, the BLM can reduce or mitigate the impact on cultural resources by applying stipulations during the development of the mining or exploration plans.

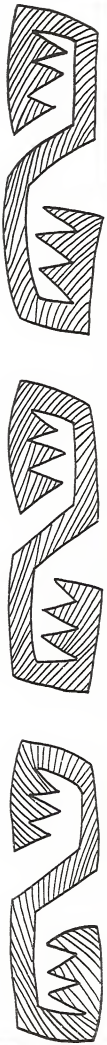
TABLE 1

ACREAGE AND OWNERSHIP STATUS FOR CHACOAN COMMUNITIES

NAME	TOTAL ACREAGE	SURFACE OWNERSHIP		SUBSURFACE OWNERSHIP		NUMBER OF MINING CLAIMS PRESENT	NUMBER OF LEASES OR RIGHT-OF-WAY (ROW)
		BLM	PRIVATE	BLM	PRIVATE		
Casamero Community	198.45	120.	78.45	120.	78.45	3	1 Row
Guadalupe Ruin	364.42	255.97	108.45	255.97	108.45	4	0
Halfway House	40.	40.	0	40.	0	0	2 Row/ 1 Lease
Kin Nizhoni Community	960.	640.	320.	640.	320.	59	0
Kutz Canyon Ruin	10.	10.	0	10.	0	0	1 Row/ 1 Lease
Pierre's Ruin Community	658.65	618.5	40.	618.5 40. Coal	40. (BLM Coal)	1	4 Leases
Casa del Rio	80.	0	80.	40.	40.	0	1 Lease
Greenlee Ruin	60.	0	60.	60.	0	Numerous	1 Lease
Lake Valley	30.	0	30.	30.	0	0	1 Row/ 1 Lease
Muddy Water (Crownpoint) Community	2,280.	0	2,280.	1,600. Coal	2,280.	0	0

Source: BLM Files

PLANNED ACTIONS



SITE DESCRIPTIONS AND PLANNED ACTIONS

Planned actions have been prepared for ten Chacoan communities and the Chacoan roads. The following sites are located on lands for which the BLM manages all or portions of the surface and subsurface estates: Casamero Community, Guadalupe Ruin, Halfway House, Kin Nizhoni Community, Kutz Canyon Ruin (Twin Angels Pueblo) and Pierre's Ruin Community. The sites for which the BLM manages some or all of the subsurface estate are: Casa del Rio, Greenlee Ruin, Lake Valley and Muddy Water (Crownpoint) Community.

Where the BLM controls both estates, on-site physical protection and administrative measures will be combined to protect cultural resources. The administrative measure of withdrawal from mineral entry will be used in cases where the BLM controls only the mineral estate.

As many as three acreage figures may be given for each prehistoric community. The size of the community is the amount of land that the BLM considers necessary to manage the site with an adequate buffer. The second figure is the acreage listed in the National Register of Historic Places nomination, which may, in some cases, differ from the the acreage listed for management purposes. The third figure (shown in the summary tables for each planned action as item number 10) is the acreage recommended for withdrawal from mineral entry. Cadastral surveys will be necessary to describe sites and community boundaries more accurately.

No destructive archaeological study of the community or individual sites will be permitted in this interim period, except in the event that structures, features, or artifacts containing cultural information become endangered, and cannot be preserved in place. Any action taken to preserve and protect cultural resources will comply with 36 CFR 800, the implementing regulations of Section 106 of the National Historic Preservation Act of 1966. For each site the following procedures will be considered, and will be implemented as appropriate.

Documentation and Development Plans

1. Detailed Recording will consist of compiling existing records of the site, and obtaining large-scale planimetric and topographic maps, measured drawings and plans, photographs, and cadastral surveys.

2. An Analysis of Site Condition will document the sources, types and extent of deterioration affecting the site. Permanent photographic stations will be established on each site. Quarterly inspections to monitor trends in deterioration will be documented by written reports photographs, and plans.

3. A Determination of Physical Protection Needs will be made to evaluate the extent of conservation and/or stabilization measures needed to protect the cultural resource. Care will be taken to ensure that the interim measures and methods do not disturb an

equal or greater amount of information than would be lost by allowing the continuation of natural deterioration.

Physical Protection

4. Signs--All of the sites will be marked with a BLM-USDI antiquities notice identifying the protection afforded by law. Signs will be placed so as not to intrude upon the resource nor to draw unwanted attention to the sites.

5. Fencing will be considered as an interim means of controlling access to specific sites in order to prevent disturbance by vehicular traffic, construction, and grazing.

6. Patrol/Surveillance will be undertaken to reduce vandalism and pot hunting. Patrol schedules for each site will be coordinated with BLM law enforcement specialists. The optimum schedule for surveillance/patrol would allow for an average of two visits per month from April through October, and at least one visit per month from November through March. These visits could be made by an archaeologist or by a ranger. Additional time has been included in the schedule to permit a Special Agent to investigate reports of vandalism.

7. Erosion Control--Erosion caused by wind action and the movement of soil and water will be reduced by such measures as improving drainage, building catch basins, diversion dams, and wind breaks. When practical and necessary, erosion controls will be constructed off-site. When on-site measures are necessary, care will be taken to minimize the effect on the site.

8. Structural Stabilization will be limited to those techniques needed to prevent the deterioration of architectural sites and features. Extensive stabilization will not be undertaken until long-term management planning has been completed.

9. Backfilling and Surface Collection--Backfilling will be the preferred form of interim stabilization. All potholes and extensive excavations that expose walls and other features create water collection basins, or in any way endanger valuable information contained in the sites will be backfilled. Artifacts that have been exposed or scattered about the site by pot hunters, and which cannot be preserved in place will be systematically collected, analyzed, and curated.

Administrative Actions

10. Withdrawal--There are many administrative actions that the BLM can take to ensure the long-term preservation of cultural resources. These actions include land acquisition and exchange, closure to public access, and special designation. During this interim management period, the only administrative action that will be initiated is that of withdrawing those areas containing identified cultural resources from mineral entry.

Name: Casamero Community (Ojos Tecolotes) (NM-01-144, LA-8779 and LA-18756 through 18769)

Size of Community: 198.45 acres

Land Status: Surface--multiple ownership, BLM and private; Subsurface--multiple ownership, BLM and private (See Table 1 for exact acreage).

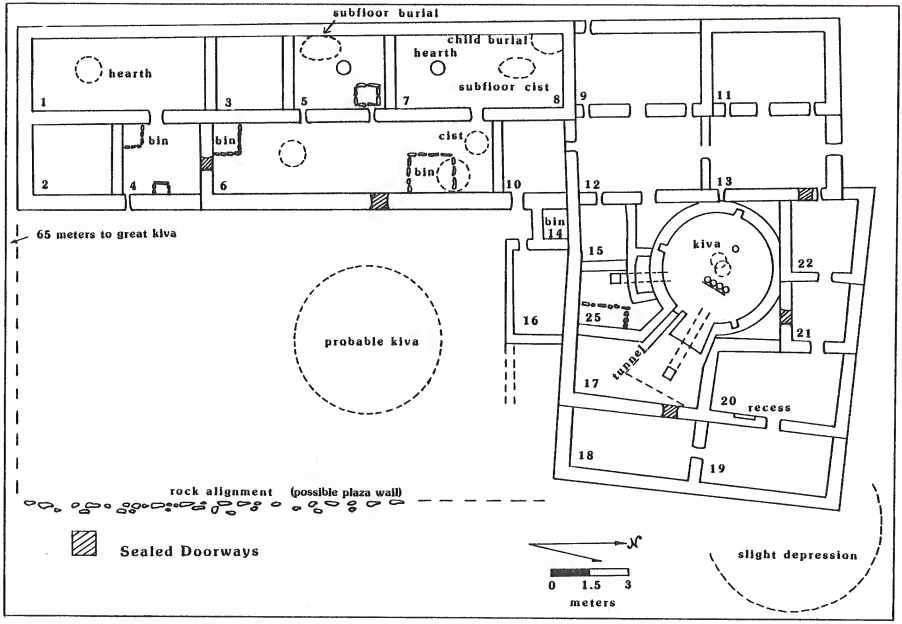
National Register Status: 146.25 acres nominated

Description: Casamero Community is located at the base of a spectacular red sandstone mesa, in the southern part of the San Juan Basin. A multistoried, L-shaped masonry pueblo with more than 23 rooms and one kiva is the largest structure in the community. A great kiva, 13 small masonry room blocks, and a rock shelter are also recorded at the this site. The main room block is associated with ceramics dating from A.D. 1000 to A.D. 1125.

Past Study: The main room block at Casamero was excavated by a private research foundation in 1966 and 1967. The BLM stabilized and backfilled the site in 1976, and portions of the community were recorded by archaeological consultants working on an electrical powerline survey in 1978. The community was recorded in more detail in Anasazi Communities of the San Juan Basin (Marshall, Stein, Loose, Novotny, 1979).

Planned Actions: Refer to Table 2.

CASAMERO



SOURCE: MARSHALL, STEIN, LOOSE, NOVOTNY, 1979

SUMMARY OF PLANNED ACTIONS FOR

CASAMERO COMMUNITY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Complete the compilation of site records	75	84	Cadastral Survey, typing, procurement, operations, graphics
b. Procurement of topographic and planimetric maps	80	81	
c. Measured site plans stabilized room block			
2. Analysis of Site Conditions			
a. On-site analysis report of main room block	75	80	graphics, typing
b. Quarterly Inspections	74	84	
3. Determination of Physical Protection Needs			
a. On-site analysis report	75	78	operations, graphics, typing
b. Preparation of Section 106 Documents	76	84	
c. Identification of Long-term needs.	80	84	
Physical Protection			
4. Signing			
No additional signs needed. Maintain existing signs	76	78	
5. Fencing			
To exclude livestock from the entire community	80	83	procurement, typing, legal services
6. Patrol/Surveillance	81	84	procurement, operations, typing
7. Erosion Control			
Recontour area around stabilized room block	83	84	operations, graphics, procurement
8. Structural Stabilization			
Repoint and patch loose wall caps and erosion at base of stabilized walls	83	84	operations, procurement, graphics
9. Backfilling and Surface Collection	83	84	operations, procurement
Administrative Action			
10. Withdrawal			
a. Complete withdrawal process for 160 acres	80	81	Cadastral Survey Land Law Examiner
b. Consult county records to establish exact location of existing claims	81	81	

Name: Guadalupe Ruin (NM-01-478, LA-2757, ENMU-838)

Size of Community: 364.42 acres

Land Status: Surface and Subsurface, BLM (See Table 1 for exact acreage).

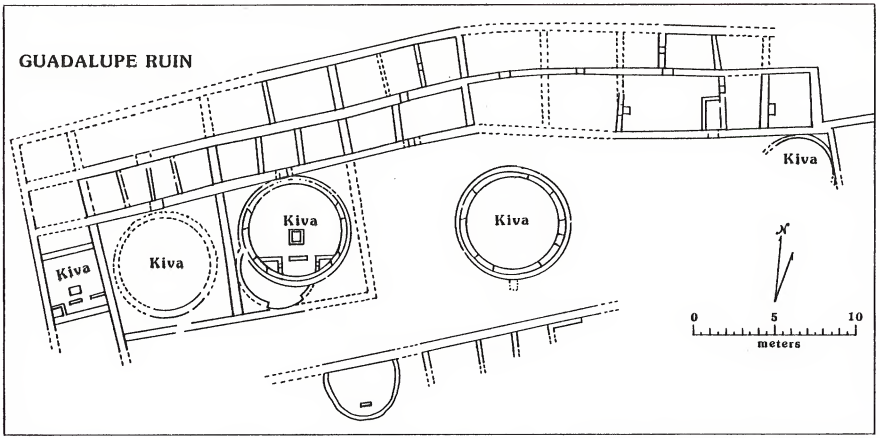
National Register Status: 6.5 acres nominated

Description: Guadalupe Ruin is a one-story masonry pueblo containing 37 rooms, 7 circular kivas and 1 above-ground rectangular kiva. The site is located on a small, narrow mesa overlooking the Rio Puerco floodplain. Smaller sites surrounding Guadalupe Mesa may be part of a community, but the relationship between these sites has not yet been demonstrated. Ceramic and architectural styles suggest that Guadalupe Ruin was occupied throughout much of the period from A.D. 900 to A.D. 1300.

Past Study: For ten years, Guadalupe Ruin has been a focal point of research for the Rio Puerco Archaeological Project, under the direction of Eastern New Mexico University. The site was excavated and partially stabilized by University field crews. The site was not backfilled. Recently, back dirt was redistributed in an attempt to slow the deterioration of exposed walls.

Condition: Guadalupe Ruin is deteriorating rapidly as a result of improper stabilization techniques and post-excavation neglect. Increased surface runoff has caused the destruction of a number of rooms on the east side of the site. Unequal distribution of backdirt and removal of room fill has caused many walls to bow and, in some cases, to collapse. Temporary roofs constructed over kivas have encouraged visitors to the site to use the kivas for picnics and parties. Safety hazards such as weakened walls and deep pits are present. This site is in need of immediate protective measures.

Planned Action: Refer to Table 3.



SOURCE: EASTERN NEW MEXICO UNIVERSITY

SUMMARY OF PLANNED ACTIONS FOR

GUADALUPE RUIN AND GUADALUPE COMMUNITY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Complete the compilation of site records	80	81	Cadastral Survey, travel time, typing, procurement, operations, graphics
b. Procurement of topographic and planimetric maps	80	81	
c. Measured site plans	80	81	
d. Class III inventory of community	82	83	
2. Analysis of Site Condition			
a. On-site analysis report	79	81	graphics, typing
b. Quarterly Inspections	78	84	
3. Determination of Physical Protection Needs			
a. On-site analysis report	79	81	operations, graphics, typing, geologist, travel time
b. Preparation of section 106 Documents	81	81	
c. Identification of Long-term needs	81	84	
Physical Protection			
4. Signing			
Replace antiquity signs on mesa top and throughout community as needed.	81	81	procurement
5. Fencing			
Needs will be determined by No. 2 and 3 above	81	83	operations, graphics, procurement
6. Patrol/Surveillance	81	84	procurement, typing, legal services
7. Erosion Control			
Recontouring mesa top and reseeding native vegetation around room block	82	83	operations, graphics, procurement, geologist
8. Structural Stabilization			
Repoint, repair and brace walls, doors and features	81	82	operations, graphics, procurement
9. Backfilling and Surface Collection	81	82	operations, graphics, procurement, geologist
Administrative Actions			
10. Withdrawal			
a. Withdraw the 255.97 acres of BLM minerals from further mineral entry	81	81	Cadastral Survey Land Law Examiner
b. Consult county records to establish exact location of existing claims	81	81	

Name: Halfway House (NM-01-3892, LA-15191, ENMU-10732)

Size of Community: 40 acres

Land Status: Surface and Subsurface--BLM (See Table 1 for exact acreage).

National Register Status: 5.15 acres nominated

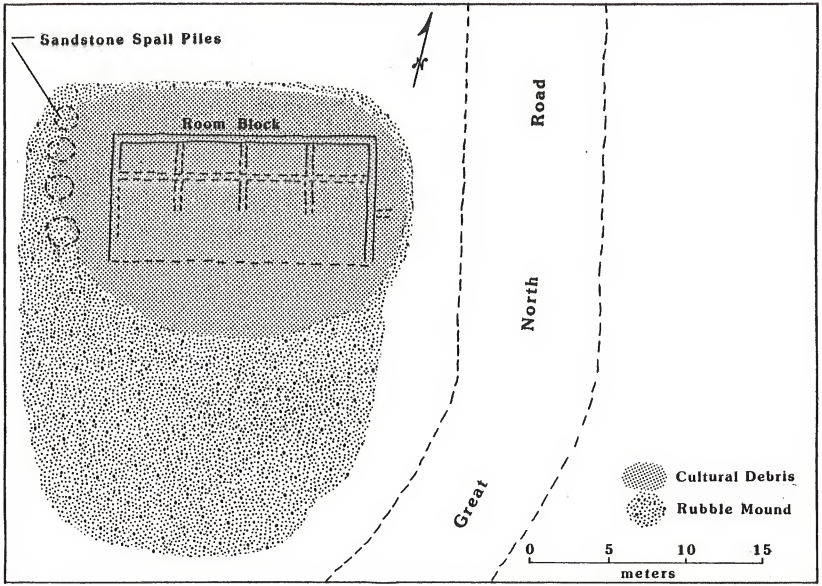
Description: Halfway House is a one-story, rectangular masonry structure estimated to contain 12 rooms. It is located on a low rise near the Gallegos Wash. Segments of what may have been a major Chacoan road have been identified on the east and south sides of the structure. The core and veneer masonry and ceramics on the site indicate an occupation between A.D. 975 and A.D. 1150.

Past Studies: Only field recordation of the site has been carried out.

Condition of Site: Trenching around the outside of the site has exposed portions of the walls to accelerated deterioration.

Planned Actions: Refer to Table 4.

HALFWAY HOUSE



SOURCE: NATIONAL REGISTER NOMINATION

SUMMARY OF PLANNED ACTIONS FOR

HALFWAY HOUSE

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Compilation of site records	83	84	Cadastral Survey, typing, graphics, procurement, operations, graphics
b. Procurement of topographic and planimetric maps	80	81	
c. Measured site plans	83	84	
2. Analysis of Site Condition			
a. On-site Analysis Report	83	83	graphics, typing
b. Quarterly Inspection	81	84	
3. Determination of Physical Protection Needs			
a. On-site Analysis Report	83	83	operations, graphics, typing,
b. Preparation of Section 106 Documents	84	84	
c. Identification of Long-term protection needs	81	84	
Physical Protection			
4. Signing			
Place one antiquities sign on west edge of structure	81	81	procurement
5. Fencing			
Need will be determined by the No. 2 and 3 above	83	83	operations, graphics, typing
6. Patrol/Surveillance	81	84	procurement, typing, legal services
7. Erosion Control			
Need will be determined by No. 2 and 3 above	83	84	operations, geologist, typing
8. Structural Stabilization			
Need will be determined by No. 2 and 3 above	83	84	operations, procurement, graphics
9. Backfilling and Surface Collection			
Need will be determined by No. 2 and 3 above	83	84	operations, graphics
Administrative Actions			
10. Withdrawal			
Complete withdrawal procedures for 40 acres	80	81	Cadastral Survey Land Law Examiner

Name: Kin Nizhoni Community (NM-01-4946, LA-18166 through LA-18226)

Size of Site: 960 acres

Land Status: Surface--multiple ownership, BLM and private; Subsurface--multiple ownership, BLM and private (See Table 1 for exact acreage).

National Register Status: 682.5 acres nominated

Description: Kin Nizhoni Community consists of 61 sites containing 86 structures with an estimated total of 304 rooms. The community clusters around a low mesa and is surrounded by marshlands. The two major structues are Kin Nizhoni, a rectangular ruin containing 14 rooms and 2 kivas, and Lower Nizhoni, which contains three rooms, a kiva, and an enclosed plaza. It is thought that Kin Nizhoni and Lower Nizhoni were linked by a roadway and that Kin Nizhoni was the terminus of a major Chacoan roadway. The community appears to have been occupied between A.D. 950 and A.D. 1100.

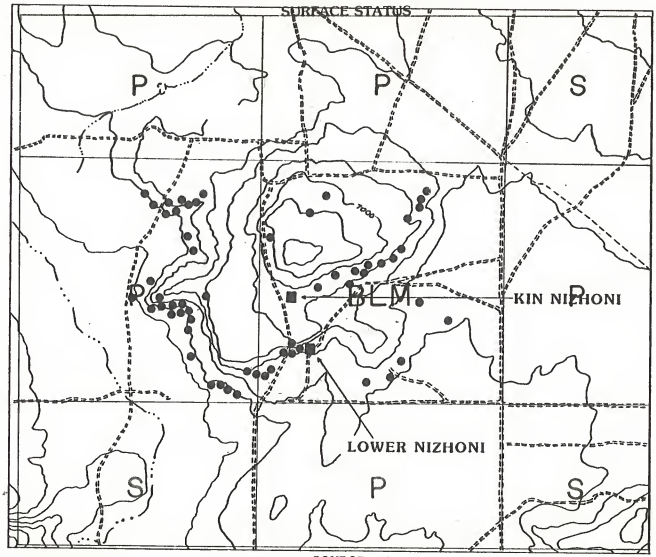
Past Studies: No in-depth study has been carried out on the community. A detailed recording of surface features is contained in Anasazi Communities of the San Juan Basin (Marshall, Stein, Loose, Novotny, 1979).

Condition of Site: Extensive pot hunting throughout the community has exposed and weakened portions of many walls. Potholes are accelerating the rate of deterioration of the ruins. Human skeletal materials are scattered about the area. Drilling operations in the 1950's resulted in noticeable damage to the community.

Planned Actions: Refer to Table 5.

KIN NIZHONI COMMUNITY

SURFACE STATUS



SCALE: 1:24000

SOURCE: MARSHALL, STEIN, LOOSE, NOVOTNY, 1979

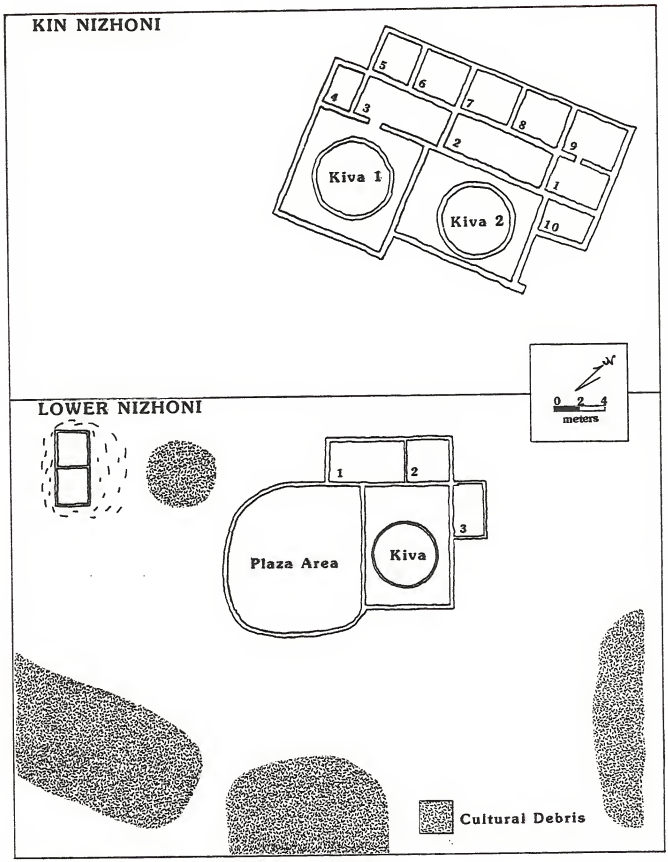
- Room Block
- Ancillary Structure & Feature
- Modern Road

T NAVAJO TRIBE

P PRIVATE

S STATE

BLM BUREAU OF LAND MANAGEMENT



SOURCE: MARSHALL, STEIN, LOOSE, NOVOTNY, 1979

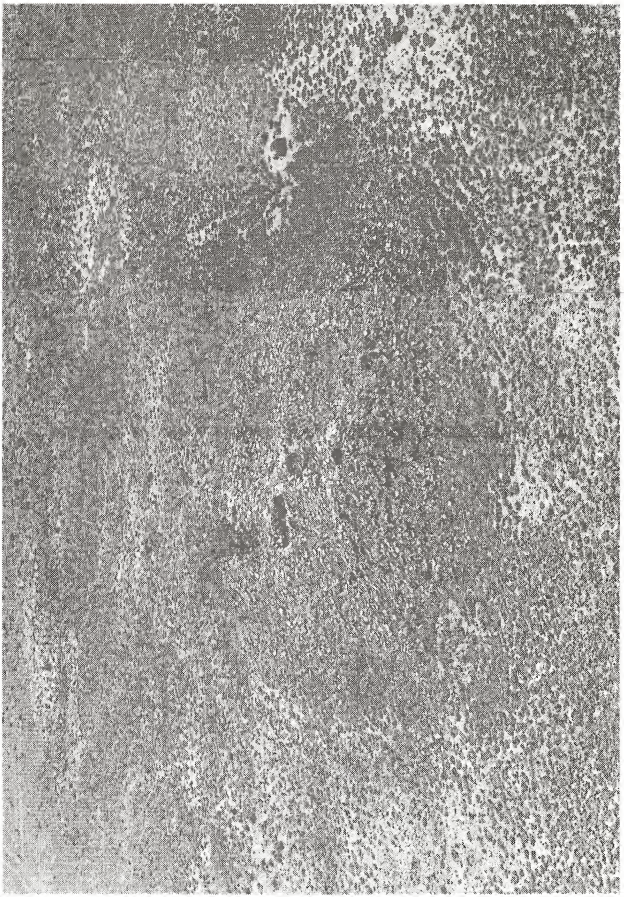


Figure 3 - Kin Nizhoni Community, main house block.

SUMMARY OF PLANNED ACTIONS FOR

KIN NIZHONI COMMUNITY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Compilation of site records	80	81	Cadastral Survey, typing, graphics, procurement, operations
b. Procurement of topographic and planimetric maps	80	80	
c. Measured site plans	81	81	
2. Analysis of Site Conditions			
a. On-site Analysis Report	81	82	graphics, typing
b. Quarterly Inspections	81	84	
3. Determination of Physical Protection Needs			
a. On-site Analysis Report	81	82	operations, geologist, typing
b. Preparation of Section 106 Documents	81	82	
c. Identification of Long-term needs	81	84	
Physical Protection			
4. Signing Place antiquities signs throughout community as needed	81	81	procurement
5. Fencing Need will be determined by No. 2 and 3 above	81	83	operations, graphics, procurement
6. Patrol/Surveillance	81	84	procurement, typing, legal services
7. Erosion Control Need will be determined by No. 2 and 3 above	81	83	operations, graphics, geologist, procurement, typing
8. Structural Stabilization Implement recommendations of reports identified in No. 2 and 3 above	82	84	operations, graphics
9. Backfilling and Surface Collection	82	84	operations, graphics
Administrative Actions			
10. Withdrawal 640 acres have been requested to be withdrawn from mineral entry	80	81	Cadastral Survey Land Law Examiner

Name: Kutz Canyon Ruin (Twin Angels Pueblo) (NM-01-40, LA-5642, ENMU-5003)

Size of Community: 10 acres

Land Status: Surface and Subsurface--BLM (See Table 1 for exact acreage).

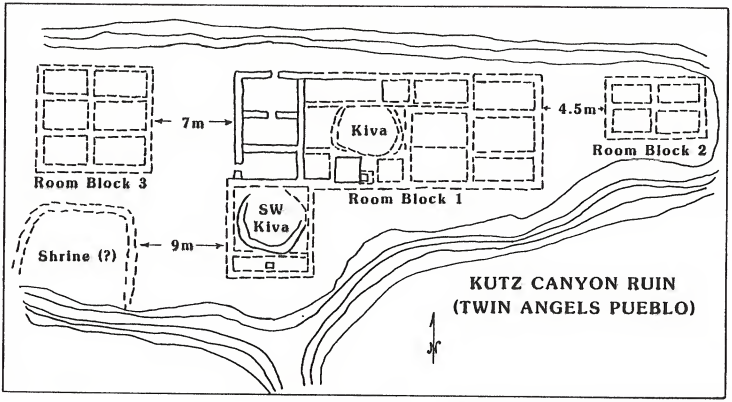
National Register Status: 5.5 acres nominated

Description: Kutz Canyon Ruin consists of three separate structures located on a steep cliff edge overlooking a wide canyon. The largest structure is a one-story rectangular room block containing 17 to 19 rooms and 2 kivas. Immediately to the southwest is a U-shaped rubble mound which may be a shrine. A low square rubble mound is located northwest of the larger room block. The core and veneer masonry and ceramics found at the site indicate an occupation between A.D. 1000 and A.D. 1250.

Past Study: Several rooms in the large room block were excavated by Earl Morris of the Colorado State Museum in 1915.

Condition of the Site: Numerous rooms have been left open and walls exposed as a result of the 1915 excavations, recent unauthorized excavations, and sporadic pot hunting.

Planned Actions: Refer to Table 6.



SOURCE: NATIONAL REGISTER NOMINATION

Figure 4 - Kutz Canyon Ruin.

SUMMARY OF PLANNED ACTIONS FOR

KUTZ CANYON RUIN

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Compilation of site records	81	82	Cadastral Survey, typing,
b. Procurement of topographic and planimetric maps	80	81	procurement, operations graphics
c. Measured site plans	82	82	
2. Analysis of Site Condition			
a. On-site Analysis Report	82	82	graphics, typing
b. Quarterly Inspection	81	84	
3. Determination of Physical Protection Needs			
a. On-site Analysis Report	82	82	operations, geology, graphics,
b. Preparation of Section 106 Documents	82	82	typing,
c. Identification of Long-term needs	81	84	
Physical Protection			
4. Signing Place an antiquities sign at the west end of the structures	81	81	procurement
5. Fencing Need will be determined by No. 2 and 3 above	82	83	operations, graphics, procurement
6. Patrol/Surveillance	81	84	procurement, typing, legal services
7. Erosion Control Need will be determined by No. 2 and 3 above	82	82	operations, geologist, graphics, typing
8. Structural Stabilization No. 2 and 3 above will determine what walls must be stabilized before backfilling is done	82	82	operations, graphics, procurement
9. Backfilling and Surface Collection	82	82	operations, graphics, procurement
Administrative Actions			
10. Withdrawal Complete withdrawal procedures for 10 acres	80	81	Cadastral Survey Land Law Examiner

Name: Pierre's Ruin Community (NM-01-3668, NM-01-2990, LA-16508 through LA-16535)

Size of Community: 658.65 acres

Land Status: Surface--multiple ownership, BLM and private; Subsurface--multiple ownership, BLM and private (See Table 1 for exact acreage)

National Register Status: 960 acres nominated

Description: Pierre's Ruin Community has 3 large room blocks, 9 small house sites, and 9 limited use areas. The community is located in unnamed arroyos north of Chaco Canyon. Ceramics and masonry style date the occupation of the site from A.D. 900 to A.D. 1150. Room blocks A and B are one-story structures built on top of a high butte. Room Block A contains 14 to 17 rooms and 3 kivas. Room Block B has 13 rooms and 1 kiva. The third room block, built at the base of an adjacent butte, has two stories and contains 20 to 25 rooms. Segments of what has been identified as the Great North Road pass to the west of this masonry complex. The 9 small house sites are rectangular or L-shaped room blocks of 5 to 10 rooms each with an associated kiva. The limited use areas include a signalling station, isolated rooms of undetermined function, and hearths.

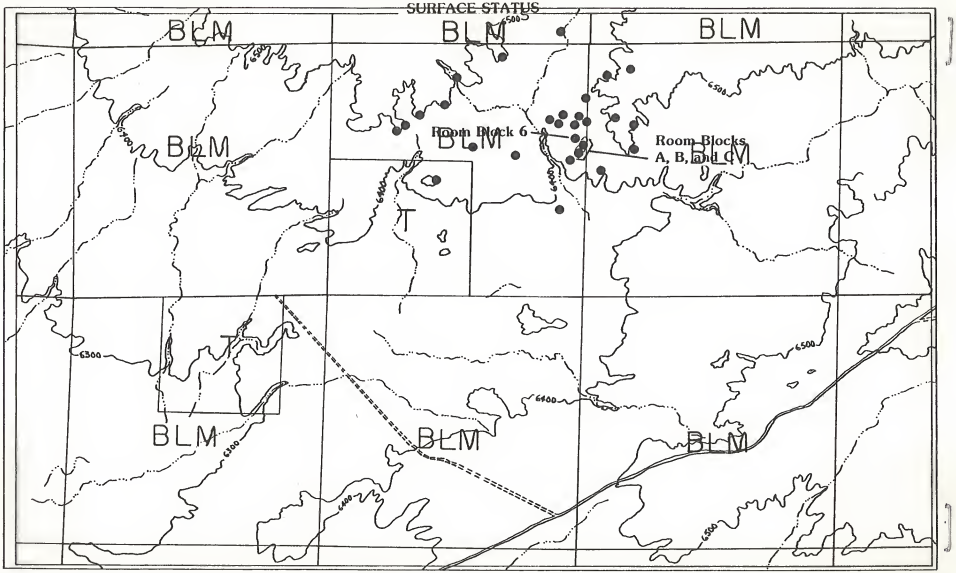
Past Study: Pierre's Ruin Community has been recorded by Eastern New Mexico University, BLM, and NPS archaeologists. A hearth (designated Site 27) in the southern part of the community was excavated in 1979. Samples from the hearth were dated to the mid-11th century. Test pits were excavated along the walls of kivas and rooms in Room Blocks A and B, presumably to allow observation of masonry style.

Condition: Pierre's Ruin Community is among the most well-preserved of the Chacaon communities. Erosion has damaged some of the limited use areas in the southern portion of the community. Pot hunting has not been a major problem, although unauthorized excavation has exposed some walls in the larger masonry units.

Planned Action: Refer to Table 7.

PIERRE'S RUIN COMMUNITY

SURFACE STATUS



LEGEND

SOURCE: NATIONAL REGISTER NOMINATION

● STRUCTURES AND FEATURES

T NAVAJO TRIBE

S STATE

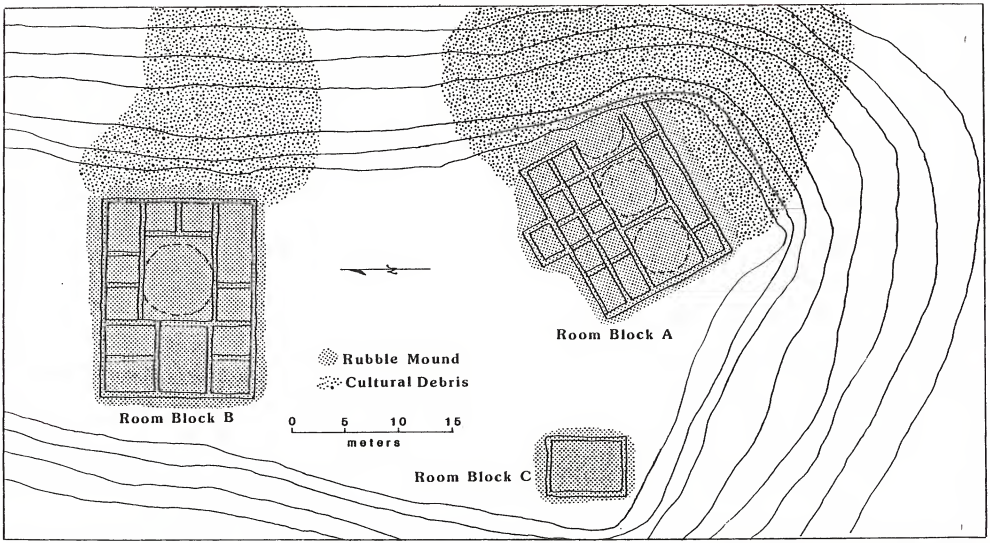
==== MODERN ROAD

P PRIVATE

BLM BUREAU OF LAND MANAGEMENT

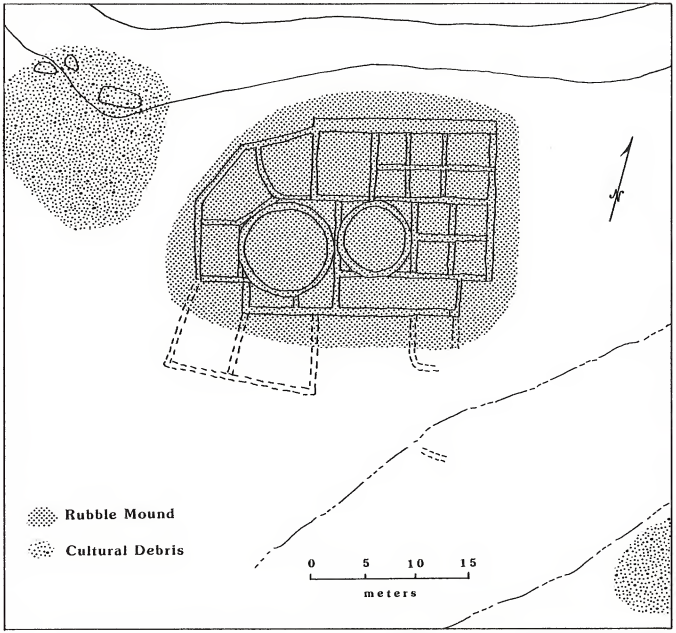
SCALE: 1:24000

PIERRE'S RUIN, ROOM BLOCKS A, B, & C



SOURCE: NATIONAL REGISTER NOMINATION

PIERRE'S RUIN, ROOM BLOCK 6



SOURCE: NATIONAL REGISTER NOMINATION

Figure 5 - Pierre's Ruin Community.

SUMMARY OF PLANNED ACTIONS FOR

PIERRE'S RUIN COMMUNITY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Complete the compilation of site records	78	81	Cadastral Survey, operations, typing, procurement, graphics
b. Procurement of topographic and planimetric maps	79	80	
c. Measured site plans	81	82	
2. Analysis of Site Condition			
a. On-site Analysis Report	82	83	graphics, typing
b. Quarterly Inspections	79	84	
3. Determination of Physical Protection Needs			
a. On-site Analysis Report	82	83	graphics, typing
b. Preparation of Section 106 Documents	83	83	
c. Identification of Long-term needs	81	84	
Physical Protection			
4. Signing Place antiquities signs throughout community as needed	81	81	procurement
5. Fencing Need will be determined by No. 2 and 3 above	81	83	operations, procurement, graphics
6. Patrol/Surveillance	81	84	procurement, typing, legal services
7. Erosion Control Need to be determined by No. 2 and 3 above	81	83	operations, geologist, graphics, procurement, typing
8. Structural Stabilization Need will be determined by No. 2 and 3 above	81	84	operations, graphics, procurement, typing
9. Backfilling and Surface Collection	82	83	operations, procurement
Administrative Action			
10. Withdrawal 940 acres have been requested to be withdrawn from mineral entry	80	81	Cadastral Survey Land Law Examiner

Name: Casa del Rio (LA-17221)

Size of Community: 80 acres

Land Status: Surface--multiple ownership, private and Navajo; Subsurface--multiple ownership, private and BLM (See Tabe 1 for exact acreage).

National Register Status: 80 acres nominated

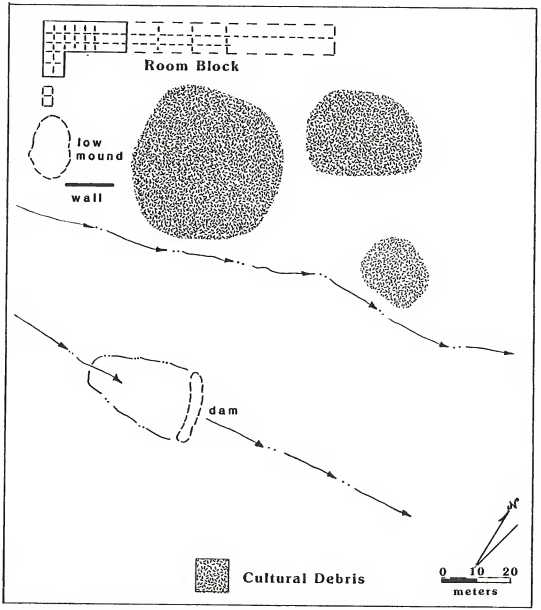
Description: Casa del Rio is a large L-shaped masonry pueblo situated on the lower slope of a mesa west of Chaco Wash. The structure appears to have been two stories high in places and has extensive refuse mounds associated with it. It contains between 125 and 130 rooms and a partially enclosed plaza. Evidence of a reservoir and a major roadway have been noted nearby. Ceramics present indicate an occupation of approximately A.D. 1000 to A.D. 1100.

Past Study: The site has been recorded but not studied.

Condition of Site: The site is reduced to a rounded rubble mound between 2 and 6 feet high. Some potholes are present.

Planned Actions: Refer to Table 8.

CASA DEL RIO



SOURCE: MARSHALL, STEIN , LOOSE, NOVOTNY , 1979

SUMMARY OF PLANNED ACTIONS FOR

CASA DEL RIO

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Nos. 1 - 9 do not apply because the BLM does not manage the surface.			
Administrative Actions			
10. Withdrawal Withdraw the 40 acres of BLM minerals underlying the site.	81	81	Cadastral Survey Land Law Examiner

Name: Greenlee Ruin (no site number given)

Size of Community: 60 acres

Land Status: Surface--private; Subsurface--BLM (See Table 1 for exact acreage)

National Register Status: 2.96 acres nominated

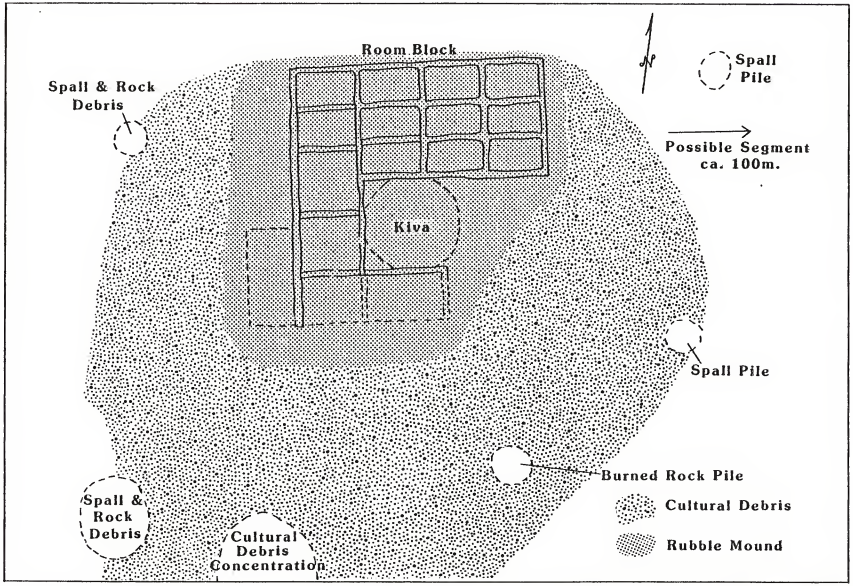
Description: Greenlee Ruin is a small, one-story masonry structure containing 16 rooms and 4 kivas arranged in a rectangular plan. Core and veneer masonry and ceramics associated with the site are of Chacoan style. A segment of what has been called the South Road occurs several meters to the east of the room block. The site is located on a tributary of Fajada Wash, south of Chaco Canyon.

Past Study: The site was recorded by National Park Service archaeologists. Greenlee Ruin may be part of a larger community which has not yet been clearly delineated.

Condition of Site: Exposed masonry walls, over four feet high, still stand at this site, and none of the rooms has been vandalized. The site is considered to be in exceptionally well-preserved condition.

Planned Action: Refer to Table 9.

GREENLEE RUIN



SOURCE: NATIONAL REGISTER NOMINATION

SUMMARY OF PLANNED ACTIONS FOR

GREENLEE RUIN

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Nos. 1 - 9 do not apply because the BLM does not manage the surface			
Administrative Actions			
10. Withdrawal Withdraw the 60 acres of BLM minerals underlying the site.	81	81	Cadastral Survey Land Law Examiner

Name: Lake Valley (NM-01-2991, LA-18755)

Size of Community: 30 acres

Land Status: Surface--private; Subsurface--BLM (See Table 1 for exact acreage).

National Register Status: 20 acres nominated

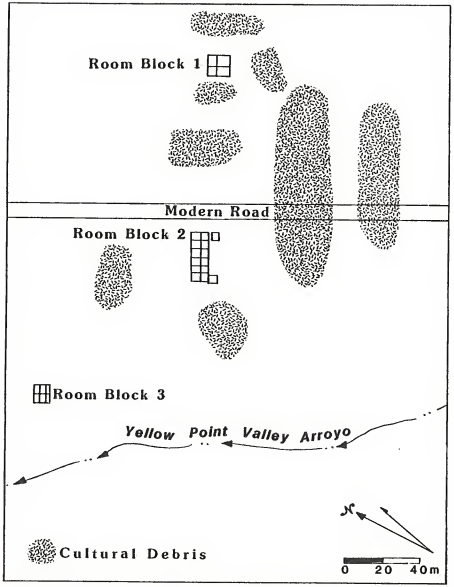
Description: Lake Valley is a pueblo containing 3 room blocks and extensive debris mounds. It is located on the gentle slope of a river vally near the confluence of two rivers. The 3 room blocks are of massive core and veneer masonry construction and are estimated to contain a total of 25 large rooms. No kivas are evident. Occupation appears to have been between A.D. 1000 and A.D. 1175. A wide diversity of ceramic styles are present. The western extensions of a major Chacoan road pass nearby.

Past Studies: The site has not been studied, nor has the general area been extensively surveyed for cultural sites.

Condition of Site: The site is in poor condition. It is severely eroded and is bisected by a heavily traveled dirt road. Pot hunting has disturbed approximately 10 percent of the site. One room block contains an extensive excavation.

Planned Actions: Refer to Table 10.

LAKE VALLEY



SOURCE: MARSHALL, STEIN, LOOSE, NOVOTNY, 1979

SUMMARY OF PLANNED ACTIONS FOR

LAKE VALLEY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Nos. 1 - 9 do not apply because the BLM does not manage the surface.			
Administrative Actions			
10. Withdrawal Withdraw the 30 acres of BLM minerals underlying the site.	81	81	Cadastral Survey Land Law Examiner

Name: Muddy Water (Crownpoint) Community (Hurley Site) (LA-10959, LA-10717, LA-17226-17279)

Size of Community: 2,280 acres

Land Status: Surface--private; Subsurface--multiple ownership, BLM and private (See Table 1 for exact acreage).

National Register Status: 2,600 acres nominated

Description: Muddy Water Community is located west of the present town of Crownpoint. This Anasazi community contains at least 30 small pueblos, a great kiva, 25 field houses, and numerous limited use areas. The center of the community appears to be a masonry structure of 10 to 15 rooms and 1 or 2 kivas. Ceramics associated with the the site indicate various periods of occupation between about A.D. 700 and A.D. 1150.

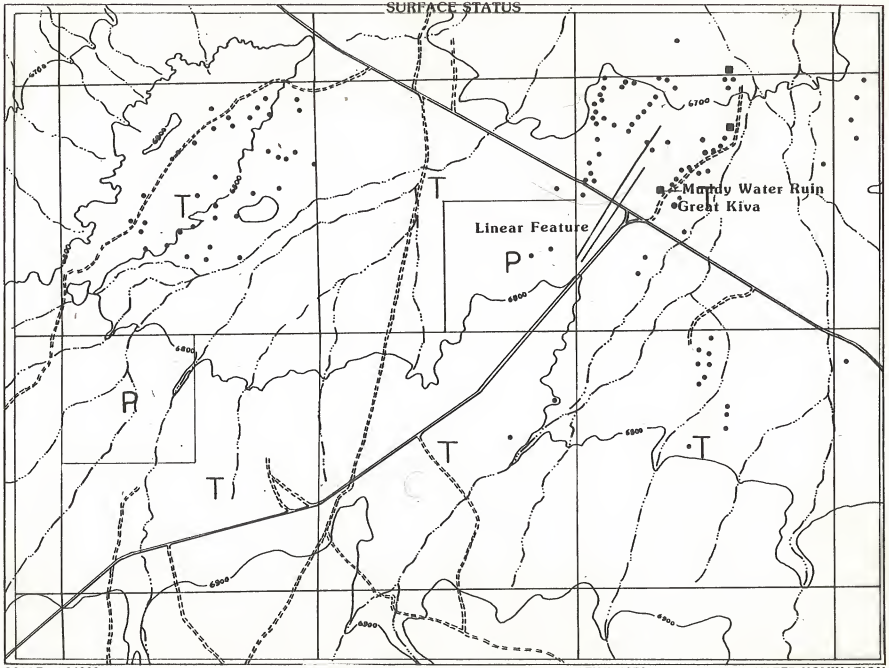
Past Study: Muddy Water Community was recorded by National Park Service archaeologists, Navajo Tribal archaeologists, and consulting archaeologists working for Mobil Oil Corporation. Numerous archaeological survey reports have been written for different sites in the community, but no comprehensive study of the community has been undertaken.

Condition of Site: Mobil Oil Corporation has conducted an extensive exploratory drilling program on portions of the Muddy Water Community. Mobil Oil Corporation field crews are extremely conscientious about avoiding the sites, and protecting these resources from unauthorized use.

Planned Action: Refer to Table 11.

MUDDY WATER COMMUNITY (CROWNPOINT)

SURFACE STATUS



SCALE: 1:24000

SOURCES: MARSHALL, STEIN, LOOSE, NOVOTNY, 1979 NATIONAL REGISTER NOMINATION

- ROOM BLOCK
- ANCILLARY STRUCTURE & FEATURE
- ==== MODERN ROAD
- T NAVAJO TRIBE
- P PRIVATE
- S STATE
- BLM BUREAU OF LAND MANAGEMENT

SUMMARY OF PLANNED ACTIONS FOR

MUDDY WATER (CROWNPOINT) COMMUNITY

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
No. 1 - 9 do not apply where BLM does not manage the surface			
Administrative Action			
10. Withdrawal Withdraw the 2,280 acres of BLM minerals underlying the site	81	81	Cadastral Survey Land Law Examiner

Name: Chacoan Roads

Size of Community: Extensive network of roads throughout the San Juan Basin

Land Status: Surface--multiple and split, federal and private; Subsurface--multiple and split, federal and private.

National Register Status: Nomination in preparation

Description: Using aerial photography and limited ground survey, National Park Service archaeologists have identified what appears to be an extensive network of roads connecting Chacoan communities with the large communities in Chaco Canyon. Segments of the roads are most apparent in the vicinity of large community structures, or where stairways cut into cliffs have been included as part of the road. At least three major routes have been identified. The Great North Road may connect the Canyon settlements with communities along the San Juan River. Other routes point toward the communities located south and west of the Canyon.

Past Study: Since the road system was first described in 1969, it has received considerable attention from archaeologists. Many articles have been written discussing the importance of the road system in understanding the Chacoan culture. A limited amount of field survey and excavation has been devoted to testing these theories.

Condition of Site: Until more segments of the roads have been positively identified and field-checked, it is not possible to make generalizations about their condition.

Planned Actions: Refer to Table 12.

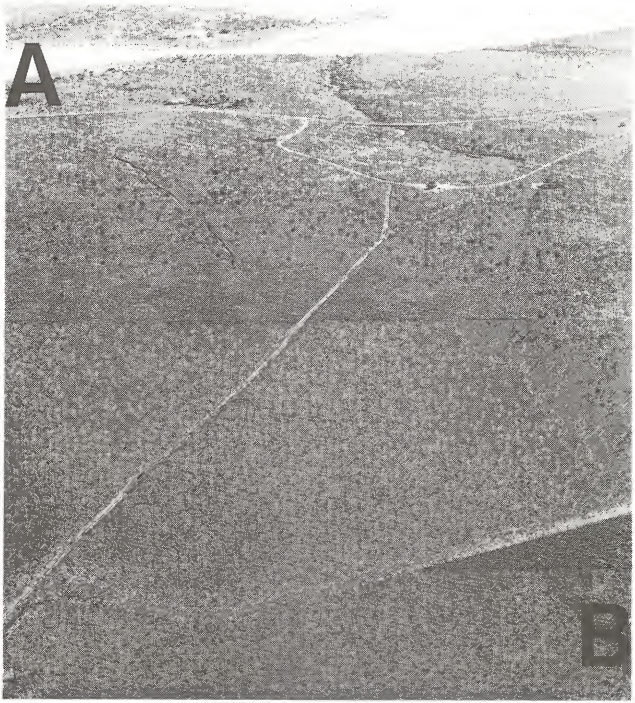


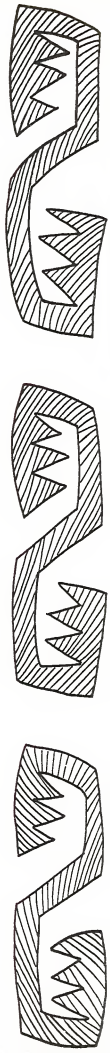
Figure 6 - Linear feature (A-B) defined as a Chacoan Road.

SUMMARY OF PLANNED ACTIONS FOR

CHACOAN ROADS

Planned Action	Begin FY	Complete FY	Anticipated Support Needs
Documentation and Development			
1. Detailed Recording			
a. Compile and analyze existing aerial, archaeological and historical records	80	81	typing, public records, procurement, graphics,
b. Perform intensive inventory (class III) of Chacoan Roads	81	82	

COST ESTIMATES
AND
IMPLEMENTATION SCHEDULE



COST ESTIMATES AND IMPLEMENTATION SCHEDULES

This section presents three funding and implementation levels for this CRMP. Funding Level I is based upon the assumption that the proposed Bisti Region Multiple Resource Program will be adopted, funded and staffed in Fiscal Year 1981. Funding Level II is basd upon the assumption that the Farmington Resource Area Headquarters will be staffed to implement this Interim CRMP. Funding Level III is based upon the assumption that the CRMP will be implemented with present staffing capabilities within New Mexico BLM.

In all three funding levels the actual stabilization work will be performed by Navajo stonemasons skilled in this type of work. These masons would be hired as a crew for the field season. Also, support from the BLM New Mexico State Office for cadastral survey and law enforcement, and from the Albuquerque District for cartographics and clerical help will be required by all funding levels.

Funding Level I

This funding level will require two full-time permanent positions, a professional archaeologist and an archaeological technician. The professional positon has been requested in the proposal for the Bisti Region Multiple Resource Program. An additional position is necessary for the archaeological technician. Additional temporary workmonths will be necessary to hire the masons for the stabilization work in FY 1982 and FY 1983.

It is estimated that a travel budget (per diem) of $1,400 and a mileage allocation of 25,000 miles be attached to the archaeological technician position. Also requested for this postion is the following training:

1) Antiquities Violation Training (USFS) - Albuquerque or Phoenix, 5 days, total cost $360; and

2) Stabilization Techniques (NPS) - somewhere in the southwest U.S., 10 days, total cost $650.

The procurement plan requests to implement this Interim CRMP are: FY 1981 - $173,677.50; FY 1982 - $3,700; FY 1983 - $5,400; and FY 1984 - $4,400. See Table 13 for a breakdown of procurement items and costs for funding Level I. Included in the FY 1981 costs are $170,000 for two contracts that the Albuquerque District is proposing to issue whether or not this Interim CRMP is funded.

The equipment plan totals are: FY 1981 - $14,145; FY 1982 - $1,350; FY 1983 - $650; and FY 1984 - $3,100. Table 14 showns a breakdown of equipment item costs for Funding Level I.

Funding Level II

In Funding Level II, two full-time permanent positions will be added to the Farmington Resource Area Office. These positions will be for a

TABLE 13

PROCUREMENT LEVEL I

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Fence Posts - 8' with 4" Top	50 ea.	$ 4.25	$ 212.50
	2	Book Case Shelves	2 ea.	30.00	60.00
	3	Book Case Base	1 ea.	15.00	15.00
	4	Book Case Top	1 ea.	10.00	10.00
	5	Chair (Desk Type)	1 ea.	125.00	125.00
	6	Tool Kit for vehicle	1 ea.	200.00	200.00
	7	High Lift Jack	1 ea.	50.00	50.00
	8	First Aid Kit for vehicle	1 ea.	25.00	25.00
	9	Sleeping Bag	1 ea.	150.00	150.00
	10	Signs (S-53 August 1977)	50 ea.	4.00	200.00
	11	Shovel	2 ea.	10.00	20.00
	12	Pulaski	1 ea.	10.00	10.00
	13	Miscellaneous under $2,000	-----	-------	2,000.00
	14	Contract Back filling excavations in Guadalupe Ruin (Also submitted in FY-1981 Preliminary Annual Work Plan for Albuquerque District)	1 ea.	50,000.00	50,000.00
	15	Contract on Chacoan Roads (Also submitted in FY-1981 Preliminary Annual Work Plan for Albuquerque District funded by 4112 subactivity)	1 ea.	120,000.00	120,000.00
	16	Rental on Radio Phone for Vehicle	12 mo.	50.00/mo	600.00
Total for FY-1981 is $173,677.50					
82	1	Maps (USGS)	50	2.00	100.00
	2	Orthophoto quads & Aerial photos	-----	-------	500.00
	3	Radio phone	12 mo.	50.00/mo	600.00
	4	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY-1982 is $3,700.00					
83	1	Rental of Radio phone	12 mo.	50.00/mo	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Heavy equipment Rental Contract	-----	-------	1,000.00
	4	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY-1983 is $5,400.00					
84	1	Rental of Radio phone	12 mo.	50.00/mo	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY-1984 is $4,400.00					
Total for Funding Level I is $187,177.50					

TABLE 14

EQUIPMENT LEVEL I

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Desk	1 ea.	$ 225.00	$ 225.00
	2	4x4 Vehicle (Chevrolet Blazer or Comprable)	1 ea.	11,000.00	11,000.00
	3	Camera-Olympus OM-2 or comp.	1 ea.	300.00	300.00
	4	35 mm lens	1 ea.	100.00	100.00
	5	50 mm lens	1 ea.	150.00	150.00
	6	70-205 zoom-macro lens	1 ea.	425.00	425.00
	7	Aluminum Camera Case	1 ea.	100.00	100.00
	8	Camera Tripod	1 ea.	75.00	75.00
	9	Portable BLM radio with vehicle adapter	1 ea.	1,500.00	1,500.00
	10	Binoculars	1 ea.	150.00	150.00
	11	Brunton Compasses with case	1 ea.	120.00	120.00
Total for FY-1981 is $14,145.00					
82	1	Pump (water type 5 hp)	1 ea.	700.00	700.00
	2	Back pack	1 ea.	50.00	50.00
	3	Plan-Hold map case	1 ea.	350.00	350.00
	4	Calculator-Canon tape type or comparable	1 ea.	100.00	100.00
	5	Polaroid Camera-negative type	1 ea.	150.00	150.00
Total for FY-1982 is $1,350.00					
83	1	Light Table	1 ea.	600.00	600.00
	2	Drafting Pen Set	1 ea.	50.00	50.00
Total for FY-1983 is $650.00					
84	1	Plane Table and Tripod	1 ea.	100.00	100.00
	2.	Optical Alidade	1 ea.	3,000.00	3,000.00
Total for FY-1984 is $3,100.00					
Total for Funding Level I is $19,245.00					

professional archaeologist and an archaeological technician. These will both be new positions. Additional temporary workmonths will be necessary to hire stonemasons for the stabilization work in FY 1982 and FY 1983.

It is estimated that a travel budget (per diem) of $1,400 be attched to each permanent postion, for a total of $2,800. A vehicle mileage allocation of 35,000 miles is requested to cover both permanent positons. The following training is requested for each permanent postion.

1) Antiquities Violation Training (USFS) - Albuquerque or Pheonix, 5 days, total cost $360; and

2) Stabilization Techniques (NPS) - somewhere in the southwestern U.S., 10 days, total cost $650.

The procurement needs for implementing this Interim CRMP under Funding Level II are: FY 1981 - $174,012.50; FY 1982 - $3,800; FY 1983 - $5,400; and FY 1984 - $4,400. See Table 15 for a breakdown of procurement items and costs for Funding Level II. Included in the FY 1981 costs are $170,000 for two contracts that the Albuquerque District is proposing to issue whether or not this Interim CRMP is funded.

The equipment plan totals are FY 1981 - $14,640; FY 1982 - $1,500; FY 1983 - $650; and FY 1984 - $3,100. Table 16 shows a breakdown of equipment costs for Funding Level II.

Funding Level III

Funding Level III is based upon the assumption that this Interim CRMP will be implemented with existing positions within the BLM New Mexico. The only positon available for this program is the Historic Architect position attached to the New Mexico State Office Cultural Resources Protection Team. Therefore, it is proposed that this positon be reclassified to the Farmington Resource Area Office and converted to an archaeology positon. No archaeological technician would be hired under this funding level. Additional temporary workmonths will be necessary to hire stonemasons for the stabilization work in FY 1982 and FY 1983.

It is estimated that a travel budget (per diem) of $1,800 and a mileage allocation of 32,000 miles be attached to this postion. Also requested is the following training:

1) Antiquities Violation Trianing (USFS) - Albuquerque or Phoenix, 5 days, total cost $360, and

2) Stabilization Techniques (NPS) - somewhere in the southwestern U.S., 10 days, total cost $650.

The procurement plan requested to implement this CRMP under Funding Level III are: FY 1981 - $173,677.50; FY 1982 - $3,700; FY 1983 -

TABLE 15

PROCUREMENT LEVEL II

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Fence Posts-8' with 4" Top	50 ea.	$ 4.25	$ 212.50
	2	Book Case Shelves	4 ea.	30.00	120.00
	3	Book Case Base	1 ea.	15.00	15.00
	4	Book Case Top	1 ea.	10.00	10.00
	5	Chair (Desk Type)	2 ea.	125.00	250.00
	6	Tool Kit for vehicle	1 ea.	200.00	200.00
	7	High Lift Jack	1 ea.	50.00	50.00
	8	First Aid Kit for vehicle	1 ea.	25.00	25.00
	9	Sleeping Bag	2 ea.	300.00	300.00
	10	Signs (S-53 August 1977)	50 ea.	4.00	200.00
	11	Shovel	2 ea.	10.00	20.00
	12	Pulaski	1 ea.	10.00	10.00
	13	Rental of Radio Phone for Vehicle	12 mo.	50.00/mo	600.00
	14	Miscellaneous under $2,000	-----	-------	2,000.00
	15	Contract for Back filling excavations in Guadalupe Ruin (Also submitted in FY-1981 preliminary Annual Work Plan for Albuquerque District)	1 ea.	50,000.00	50,000.00
	16	Contract on Chacoan Roads (Also submitted in FY-1981 preliminary Annual Work Plan for Albuquerque District)	1 ea.	120,000.00	120,000.00
Total for FY-1981 is $174,012.50					
82	1	Maps (USGS)	100	200.00	200.00
	2	Orthophoto quads & Aerial Photos	-----	--------	500.00
	3	Radio phone unit	12 mo.	50.00/mo	600.00
	4	Miscellaneous under $2,000	-----	--------	2,500.00
Total for FY-1982 is $3,800.00					
83	1	Rental of Radio Phone	12 mo.	50.00/mo	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Heavy Equipment Rental Contract	-----	--------	1,000.00
	4	Miscellaneous under $2,000	-----	--------	2,500.00
Total for FY-1983 is $5,400.00					

TABLE 15

PROCUREMENT LEVEL II

(Continued)

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
84	1	Rental of Radio Phone	12 mo	50.00/mo	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY-1984 is$4,400.00					
Total for Funding Level II is$187,612.50					

TABLE 16

EQUIPMENT LEVEL II

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Desk	2 ea.	$ 225.00	$ 450.00
	2	4x4 Vehicle (Chevrolet Blazer or Comparable)	1 ea.	11,000.00	11,000.00
	3	Camera-Olympus OM-2 or Comp.	1 ea.	300.00	300.00
	4	35 mm lens	1 ea.	100.00	100.00
	5	50 mm lens	1 ea.	150.00	150.00
	6	70-205 Zoom-Macro lens	1 ea.	425.00	425.00
	7	Aluminum Camera Case	1 ea.	100.00	100.00
	8	Camera Tripod	1 ea.	75.00	75.00
	9	Portable BLM radio with vehicle adaptor	1 ea.	1,500.00	1,500.00
	10	Binoculars	2 ea.	150.00	300.00
	11	Bruton Compass with Case	2 ea.	120.00	240.00
Total for FY-1981 is $14,640.00					
82	1	Pump (Water type 5 hp)	1 ea.	700.00	700.00
	2	File Cabinet	1 ea.	200.00	200.00
	3	Plan Hold Cabinet	1 ea.	350.00	350.00
	4	Calculator-Canon type or comp.	1 ea.	100.00	100.00
	5	Polaroid Camera-Negative type	1 ea.	150.00	150.00
Total for FY-1982 is $1,500.00					
83	1	Light Table	1 ea.	600.00	600.00
	2	Drafting Pen Set	1 ea.	50.00	50.00
Total for FY-1983 is $650.00					
84	1	Plane Table & Tripod	1 ea.	100.00	100.00
	2	Optical Alidade	1 ea.	3,000.00	3,000.00
Total for FY-1984 is $3,100.00					
Total for Funding Level II is $19,890.00					

$7,200; and FY 1984 - $6,200. See Tabel 17 for a breakdown of procurement items and costs for Funding Level III. Inlcuded in the FY 1981 costs are $170,000 for two contracts that the Albuquerque District is proposing to issue whether or not this Interim CRMP is funded. The equipment plan totals are: FY 1981 - $14,145; FY 1982 - $1,350; FY 1983 - $650; and FY 1984 - $3,100. Table 18 shows a breakdown of equipment costs for Funding Level III.

Under Funding Level III, the implementation schedule will be different than that proposed under Funding Levels I and II. With the loss of the archaeological technician position, the professional archaeologist will have to assume the responsibility of patrolling the Chacoan communities.

This will drastically reduce any proposal for intensive inventory of these communities for future planning purposes. Also, the amount of emergency stabilization work will be reduced because of the time required to supervise the stabilization crews. This is the least desirable funding level of those analyzed by the team preparing this Interim CRMP.

TABLE 17

PROCUREMENT LEVEL III

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Fence Posts-8' with 4" Tops	50 ea.	$ 4.25	$ 212.50
	2	Book Case Shelves	2 ea.	30.00	60.00
	3	Book Case Base	1 ea.	15.00	15.00
	4	Book Case Top	1 ea.	10.00	10.00
	5	Chair (Desk Type)	1 ea.	125.00	125.00
	6	Tool Kit for Vehicle	1 ea.	200.00	200.00
	7	High Lift Jack	1 ea.	50.00	50.00
	8	First Aid Kit for Vehicle	1 ea.	25.00	25.00
	9	Sleeping Bag	1 ea.	150.00	150.00
	10	Signs (S-53 August 1977)	50 ea.	4.00	200.00
	11	Shovel	2 ea.	10.00	20.00
	12	Pulaski	1 ea.	10.00	10.00
	13	Rental on Radio Phone for Vehicle	12 mo.	50.00/mo	600.00
	14	Miscellaneous under $2,000	-----	-------	2,000.00
	15	Contract Back filling excavations of Guadalupe Ruin (Also submitted in FY-1981 Preliminary Annual Work Plan for Albuquerque District)	1 ea.	50,000.00	50,000.00
	16	Contract on Chacoan Roads (Also submitted in FY-1981 Preliminary Annual Work Plan for Albuquerque District)	1 ea.	120,000.00	120,000.00
Total for FY-1981 is$173,677.50					
82	1	Maps (USGS)	50	2.00	100.00
	2	Orthophoto quads & Aerial photos	-----	-------	500.00
	3	Rental of Radio Phone	12 mo.	50.00/mo.	600.00
	4	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY-1982 is$3,700.00					
83	1	Rental of Radio Phone	12 mo.	50.00/mo.	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Fencing Contract	1 mile	1,800/mile	1,800.00
	4	Heavy equipment rental contract	-----	-------	1,000.00
	5	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY- 1983 is$7,200.00					
84	1	Rental of Radio Phone	12 mo.	50.00/mo.	600.00
	2	Fence-4 strand barbed wire	1 mile	1,300/mile	1,300.00
	3	Fencing Contract	1 mile	1,800/mile	1,800.00
	4	Miscellaneous under $2,000	-----	-------	2,500.00
Total for FY- 1984 is$6,200.00					
Total for Funding Level III is$190,777.50					

TABLE 18

EQUIPMENT LEVEL III

Fiscal Year	Item	Description	Units	Unit Cost	Total Cost
81	1	Desk	1 ea.	$ 225.00	$ 225.00
	2	4x4 Vehicle (Chevrolet Blazer or Comparable)	1 ea.	11,000.00	11,000.00
	3	Camera-Olympus OM-2 or Comp.	1 ea.	300.00	300.00
	4	35 mm lens	1 ea.	100.00	100.00
	5	50 mm lens	1 ea.	150.00	150.00
	6	70-205 zoom-macro lens	1 ea.	425.00	425.00
	7	Aluminum Camera Case	1 ea.	100.00	100.00
	8	Camera tripod	1 ea.	75.00	75.00
	9	Portable BLM radio with Vehicle Adapter	1 ea.	1,500.00	1,500.00
	10	Binoculars	1 ea.	150.00	150.00
	11	Brunton Compases with case	1 ea.	120.00	120.00
Total for 1981 is $14,145.00					
82	1	Pump (water type 5 hp)	1 ea.	700.00	700.00
	2	Back pack	1 ea.	50.00	50.00
	3	Plan-Hold map case	1 ea.	350.00	350.00
	4	Calculator-Canon tape type or comparable	1 ea.	100.00	100.00
	5	Polaroid Camera-negative type	1 ea.	150.00	150.00
Total for FY-1982 is $1,350.00					
83	1	Light Table	1 ea.	600.00	600.00
	2	Drafting Pen Set	1 ea.	50.00	50.00
Total for FY-1983 is $650.00					
84	1	Plane Table and Tripod	1 ea.	100.00	100.00
	2	Optical Alidade	1 ea.	3,000.00	3,000.00
Total for FY-1984 is $3,100.00					
Total for Funding Level III is $19,245.00					

MANAGEMENT EVALUATIONS AND REVISIONS

In order to carry out this Interim CRMP effectively, the planned actions must be accomplished on schedule. Periodic evaluation of progress will be necessary. The District archaeologist will review the on-site inspection reports quarterly to insure that serious problems are identified. The District archaeologist and the special agent will review patrol and surveillance reports quarterly to establish scheduling needs.

In order to carry out appropriate levels of physical protection and administrative action for each site, the following key events must occur on schedule.

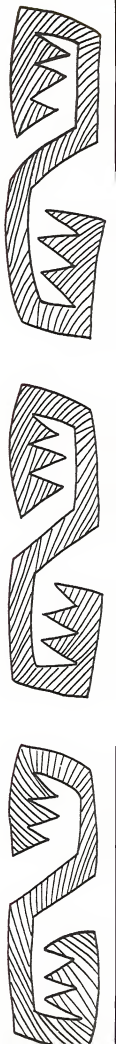
1. By the end of FY 81:
   - complete withdrawals
   - place antiquity signs on all sites.

2. During FY 81-82:
   - complete documentation and development plans for Guadalupe Ruin, Kin Nizhoni Community, Kutz Canyon Ruin, and the Chacoan Roads.

3. During FY 83-84:
   - complete documentation and development plans for Pierre's Ruin Community, Halfway House, and all long-range planning needs.

An annual review of this Interim CRMP will be conducted to revise the planned actions as appropriate and to update budget and program needs.

PUBLIC PARTICIPATION



PUBLIC PARTICIPATION

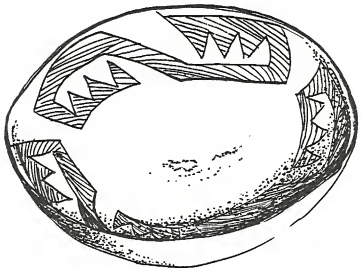
The BLM Albuquerque District will inform the public about this Interim CRMP as part of its regular public information program. Through local news releases and short newspaper articles, the District will make an effort to generate concern about the management of Chacoan communities.

While this Interim CRMP is in effect, public participation activities related to the final CRMP may be taking place. These would include: public hearings (or less formal meetings) to gather opinions about the CRMP and suggestions on handling related problems; consultation with the State Historic Preservation Officer; and placement of a notice of withdrawal of lands from mineral entry in the Federal Register (when applicable).

A BLM-wide cultural resources public awareness program is proposed to begin in the fall of 1980. This program, to be called "Protect America's Silent Treasures" (PAST), would emphasize the need to preserve cultural resources, the present extent of vandalism and unauthorized use of these resources, and the legal consequences of such use.

The campaign would include many of the same types of activities mentioned above, but would be much more extensive. Radio lectures, magazine articles, workshops or forums with the public and the professional community, fact sheets, slide shows, and numerous other means would be used to spread information about cultural resources. In some cases, presentations already put together by the District could be modified to include more emphasis on Chacoan communities.

APPENDICES



Appendix I

FACT SHEET

BLM's Cultural Resource Management Program

(July 1980)

Introduction. With full land management responsibility for more than half of the Federal land base, (more than 400 million acres), and an additional 370 million acres of the Federal minerals estate underlying non-federally owned surface, the Bureau of Land Management (BLM) has a more extensive responsibility for the management and protection of cultural resources than any other Federal agency. Containing the largest remaining cultural resource base under Federal control, the public lands administered by BLM represent a vast storehouse of cultural resource values and knowledge.

The BLM cultural resource management program encompasses a wide range of scientific and academic disciplines, including archaeology, history, historic architecture, anthropology and ethnology. The concerns of contemporary ethnic and cultural groups, such as Native Americans, are also a part of the BLM management of heritage resources. Historic preservation is an important part, but not the whole, of the Bureau's cultural resource management program.

Cultural resource management is integrated into the Bureau's multiple use land management philosophy. Cultural resources are recognized first as a resource value to be managed on their own merits, and secondly as values to be protected from inadvertent damage by any land management action that the Bureau might undertake as a multiple use agency. In recognition of the responsibilities, the BLM has implemented one of the most comprehensive cultural resource management programs in the Federal government. We use the term comprehensive because the Bureau's program involves the basic inventory of multi-million acres planning units, land-use planning and the development of area-specific management action, mitigation of specific project effects, and site-specific protection efforts.

Program Objectives. The BLM's cultural resource management program has been developed with the following objectives:

A. Protect and preserve representative samples of the full array of cultural resources for the benefit of scientific and socio-cultural use by present and future generations.

B. Ensure that cultural resources are given full consideration in all land-use planning and management decisions.

C. Manage cultural resources so that scientific and socio-cultural values are not diminished, but rather maintained and enhanced.

D. Ensure that the Bureau's undertakings avoid inadvertent damage to cultural resources, both Federal and non-Federal.

Authorities. The authorities of the BLM's cultural resource management program are found in legislation and executive directives. The major authorities are: the Antiquities Act of 1906; the Archaeological Resources Protection Act of 1979; the National Historic Preservation Act of 1966; the Archaeological and Historic Preservation Act of 1974; Executive Order 11593 ("Protection and Enhancement of the Cultural Environment," May 13, 1971), the American Indian Religious Freedom Act of 1978; and the Federal Land Policy and Management Act (FLPMA) of 1976.

With the FLPMA, Congress has underscored the Bureau's responsibilities for the management and protection of cultural resources. FLPMA explicitly directs the BLM to manage public lands on the basis of multiple use, and "...in a manner that will protect the quality of scientific, ...historical, ...environmental...resources, and archaeological values; [and] that, where appropriate, will preserve and protect certain public lands in their natural condition." FLPMA also requires the inventory of public lands; and provides for long-range, comprehensive resource planning and management of these lands.

FLPMA and other laws that govern the BLM's land management responsibilities (e.g., the Mineral Leasing Act of 1920) authorize the BLM to condition the issuance of various permits, grants, and leases to protect the environment, including cultural resources. This may include terms and conditions for the identification of cultural resources as well as for the protection or recovery of cultural information.

Background. Although the BLM has been managing specific cultural resource properties for a number of years (e.g., Lowry Ruin National Historic Landmark and Grand Gulch Archaeological Primitive Area), the cultural resource management program is relatively new. The issuance of E.O. 11593 in May of 1971 and the promulgation the Advisory Council on Historic Preservation's procedures for the protection of historic and cultural properties (36 CFR Part 800) in January 1974, provided the catalyst for the BLM to develop an active cultural resource management program. To date, the Bureau has more than 120 full-time cultural resource specialists. These professionals are involved in cultural resource inventory and evaluations, regional land-use planning, activity plan development, protection and stabilization implementation, contract coordination, 106 compliance, project planning and mitigation, antiquities permit processing and compliance monitoring, and the interpretation of cultural resources for public education.

Program Aspects. In order to deal more effectively with the variety of activities in which the Bureau is responsible, the BLM recognizes two aspects of its cultural resource management program, a primary and support aspect. The primary aspect operates under the philosophy that cultural resources are managed as a resource equivalent to the management of other resources under the administration of the BLM, and that appropriate use and protection will be afforded to all cultural

resource values. The degree of use and protection is commensurate with the scientific and socio-cultural values of the resources, the degree of threat, and the vulnerability of the resources.

The support aspect is intended to ensure that Bureau undertakings avoid inadvertent damage to cultural resources. When avoidance is not possible or practical, then appropriate measures to mitigate the effects are carried out.

In this light, the primary aspect provides for the (A) inventory and evaluation, (B) planning and nomination, (C) protection and use of BLM administered cultural resources, while the support aspect covers (D) project compliance and mitigation. These elements are discussed below.

Program Elements and Current Status.

A. Inventory and Evaluation.

Cultural resource inventory provides the much needed data for land-use plans, activity plans, environmental assessments, and other multiple resource management efforts on the public land. The element includes the preparation of cultural resource overviews (Class I - existing data inventory); sampling field (Class II) inventories designed to allow the BLM to make an objective estimate of the nature and distribution of an areas' cultural resources without having to make an on-the-ground inventory of the entire area; the site evaluation process to provide a basis for land use allocation related to cultural resources; supplementary studies to provide identified data needs in order to assist with Bureau management of cultural resources; and, the automation of the Bureau's cultural resource data. Intensive field inventory (Class III) is usually carried out as part of compliance responsibilities, activity plan development or project implementation.

Estimates for cultural resource sites or properties on BLM-administered lands range from a half-million to over five million. These sites or properties range from Southwestern prehistoric ruins to historic ghosttowns, from aboriginal rock art to early wagon roads, and from small scatters of ancient stone tools to abandoned military posts.

In the Lower 48 States, Class I overviews have been completed or are underway for about a third of the BLM-administered lands. Class II inventories have been completed, at various sampling levels, on about a sixth of the BLM administered lands. Class III inventories have been completed over approximately 2 million acres.

B. Planning and Nomination.

The BLM plans for the use and protection of cultural resources on public land through the Bureau planning system

(BPS). How the cultural resources use recommendations and management objectives identified in the BPS are to be implemented are documented in a Cultural Resource Management (Activity) Plan (CRMP). The CRMP is the guiding action document to implement the BLM policy to protect and make appropriate use of cultural resources. The BLM is also responsible for the identification and nomination of National Register quality properties located on the public land to the National Register of Historic Places. National Register quality properties are identified as a result of the land-use planning, project clearance inventories, research work, and other inventory efforts on public land.

At the end of FY 1979, there were 92 cultural resource properties listed on the National Register of Historic Places that are located on BLM administered lands. In addition, 42 National Register nominations were pending. Ten of the National Register listed properties have been designated as National Historic Landmarks. This includes four properties in Alaska (Iyataget Site, Gambell Sites, Chaluka Site, and Yukon Island Main Site), two properties in Utah (Desolation Canyon and Alkali Ridge), and one property each in Califorina (Walker Pass), Colorado (Lowry Ruin), Montana (Bannack Historic District), and Wyoming (South Pass).

C. Protection and Use.

The primary aspect of the cultural resource management program provides for the physical protection of critical cultural resource properties and the maintanence of onging protection efforts. This includes partol and surveillance, fencing, signing, structural stabilization, detailed recordation, salvage, and curation. Also included in this effort is the implementation of the law enforcement and public education aspects of the recently passed Archaeological Resources Protection Act. This includes implementing a cultural resource public affairs plan around the theme of "Protect America's Silent Treasurs" ("PAST").

The use portion of this element primarily involves antiquities permits. Permits are required for the removal, excavation, and associated activities of cultural resources on Federal land. This includes both research and consultation services. The BLM processes antiquities permit allocations and manages all permits issued, including the necessary compliance work.

In FY 1979, the BLM processed 218 antiquities permits and coordinated the issuance of 163 antiquities permits. Of the issued permits, 133 were for consultation services work, which may represent numerous cultural resource actions under one permit. It is estimated that over 2,000 cultural resource actions were carried out under these permits.

The BLM has provided physical protection to dozens of BLM administered cultural resource properties on a yearly basis. Included among these properties are Ft. Egbert Historic District (Alaska), Grand Gulch Archaeological District (Utah), Escalante Ruin (Colorado), Oregon Trail (Wyoming), Snake River Archaeological area (Idaho), Colorado River Intaglios (Arizona and California), Homolovi Ruin (Arizona), Pierre's Ruin Community (New Mexico), and Cold Spring Pony Express Station (Nevada).

D. Compliance and Mitigation.

Legislative mandates, particulary Section 106 of the National Historic Preservation Act (NHPA), require that all BLM resource programs undertake or cause to be undertaken certain cultural resource inventory, evaluation, compliance, and mitigation work for any of their actions that might affect cultural resources. Procedures developed by the cultural resource management program are used by other BLM resource programs to do this work. All BLM programs, as benefiting activities, are responsible for funding: (1) cultural resource inventories and evaluations needed to ensure compliance, beyond the date provided by the cultural resource program through the BPS; (2) compliance documentation for Section 106 of the NHPS; and (3) cultural resource protection work needed to mitigate effects of their projects upon cultural resources.

As a result of the large number and wide variety of actions with which the BLM is involved, full compliance with Section 106 of NHPA for all cases has been extremely difficult. However, FY 1979 has shown a substantial increase in compliance.

The majority of the actions on BLM-administered lands, or in areas of BLM responsibility, requiring cultural resource clearance work are Bureau authorized actions such as right-of-way permits, mineral leases and lease operation approvals, grazing leases and range improvement permits, and special recreation use permits. For many of these permits, and special recreation use permits. For many of these actions, the lesse or permittee, as a condition to the authorization, obtains the services of a qualified cultural resource specialist to conduct the necessary cultural resource inventory and, if needed, carry out the mitigation as stipulated by the BLM.

The BLM's cultural resource protection effort encourages avoidance of resources where prudent and feasible. Only if avoidance cannot be accomplished is mitigation necessary. Mitigation of affect on cultural resources can range from detailed recordation to total salvage of the resource. Modification of the original project plan has resulted in the necessity for only a limited number of cultural resource mitigation projects in FY 1979. As part of this support

aspect, a Programmatic Memorandum of Agreement (PMOA) which streamlines the cultural resource compliance process with the Advisory Council on Historic Preservation for BLM's rangeland mangement program and a similar PMOA pertaining to the Federal Coal Management program have been ratifed. The BLM is also in the process of preparing "counterpart" regulations with the Council, pursuant to 36 CFR 800.11.

APPENDIX 2

BLM NEW MEXICO

STABILIZATION PROJECTS

1973-Present

Project	Site No.	Year
Albuquerque District		
Shaft Ruin	NM-01-015	1973
Simon Canyon	NM-01-1167	1974
Christmas Tree	NM-01-2001	1974
Francis Canyon	NM-01-189	1974
Crow Canyon	NM-01-2002	1974
Largo School	NM-01-2000	1974
Hooded Fireplace	NM-01-012	1974
Tapacito	NM-01-04	1974
Split Rock	NM-01-005	1974
Casamero	NM-01-144	1976
Shephard Site	NM-01-829	1977
Reservoir	NM-01-821	1977
Guadalupe Ruin	NM-01-478	1977-present
Socorro District		
Promontory Site	NM-02-004	1975
Homestead	NM-01-1608	1975
Skull Site	NM-02-019	1976
Oak Tree Site	NM-02-017	1976
Dittert Site	NM-02-085	1977
Las Cruces District		
Three Rivers Recreation Area	NM-03-229 NM-03-1484	1976

APPENDIX 3

BLM NEW MEXICO

DETAILED RECORDING PROJECTS

1977-PRESENT

Project	Site No.	Year
Albuquerque District		
Azabache Stage Station	NM-01-3816	1977-1979
Daniel Cordova Homestead	NM-01-3312	1979-1980
Uriah Spearman Homestead	NM-01-3309, 3310	1979-1980
Chijuilla Community School House	NM-01-3311	1979-1980
Chacoan Communities		
Pierre's Ruin Community	NM-01-2990	1979-present
Kutz Canyon Ruin	NM-01-40	1979-present
Kin Nizhoni Community	NM-01-4946	ongoing
Halfway House	NM-01-3892	ongoing
Casamero Community	NM-01-144	ongoing
Guadalupe Ruin	NM-01-478	1977-present
Socorro District		
Newton Site	NM-02-167	1977-1978
Penole Site	NM-02-014	1977-1978
Narrows Site	NM-02-164	1977-1978
"Teypama" Pueblo	NM-02-205	1979-present
Arroyo del Tajo Pictographs	NM-02-513	1979-present

APPENDIX 4

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